



uv tanning • spray-tanning • destination tanning store • red light therapy collagen treatment
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22nd June 2011

Kate Stringer
Investigator
Enforcement Branch
Commerce Commission
PO Box 2351
Wellington 6140

Dear Kate,

Thank you for your letter dated 3 June 2011. We appreciate the opportunity to be part of your initial review process and to respond to the allegations made by Consumer New Zealand and the Cancer Society of New Zealand.

In order to make a full response to the allegations, we feel the relationships between our company and the two Complainants needs first to be reviewed.

BACKGROUND

1. Get Brown Tanning and the Cancer Society of New Zealand

Our company has been involved in the indoor tanning industry since 1988, with a history of industry participation, including our director Gabrielle Brown's membership of the committee which drew up the first Standard AS/NZS 2635:2002 Solaria for Cosmetic Purposes, and being founders of the Indoor Tanning Association New Zealand Inc (INTANZ) group. Over the years numerous attempts have been made to appeal to the Cancer Society for co-operation between our organisations. We believe our concern is very much aligned with theirs- we wish to see improved public health outcomes for cancer and feel we're uniquely placed to educate the public about the dangers of over-exposure to UV light. Unfortunately the representatives of the Cancer Society have rejected all our attempts at co-operation.¹

¹ 'Differing Cancer Views Makes Alliance Unlikely: Indoor tanning sector wants to team up with Cancer Society but society says the organization does not share its vision', 29 Oct 2008, <http://home.nzcity.co.nz/news/article.aspx?id=92053&fm=newsmain,nrhl>

We believe the Cancer Society has an extreme conflict of interest when it comes to the issue of ultraviolet light exposure (and commercial tanning), because their extensive, Society brand-endorsed line of sun-blocking, after-tan and fake tan products are now a major source of funds for their private charity- far in excess of monies accumulated by traditional fund-raising methods. Therefore any actions on their part promoting more sunscreen use, discouraging clients away from commercial sun-tanning establishments by encouraging them to pursue sunless tanning options (from their own retail line) or any other prejudicial act towards the sunbed industry- including this complaint- must be viewed as compromised. *(This view is supported further on in this letter when the magnitude of the disproportionate skin cancer/public health warning messages to the actual risks involved is demonstrated.)*

We believe the Cancer Society's involvement in this complaint against our company in particular is an indefensible pursuit. Judith Galtry from the Cancer Society admitted in a recent magazine article² that "there are some good operators" in the sunbed industry. As our business was the only Auckland indoor tanning operator and one of only seven nationally to score 100% in the 2010 Consumer survey³ on which this complaint is based, it seems reasonable to assume one of those 'good operators' is Get Brown Tanning. And yet, the Society pursues a complaint in which our company's alleged misleading representations outnumber the rest. With 62 other operators out there failing the NZ public when measured by the Complainants' standards- we seriously question the motivation for our inclusion in this complaint. It seems their true intention is to hamper the activities of even those doing things correctly and this, in our view, is a clear violation of the spirit of Fair Trading.

2. Get Brown Tanning and Consumer NZ

Get Brown Tanning's retail service began in 2004. We have just once been included in a review by Consumer NZ- as part of the 2010 survey- in which we scored a complete 100% score. During the process of drafting the article which supported the survey results, Consumer's representatives contacted us for responses to those results.⁴

As a consumer advocate body who aims to 'Make decisions easy', we question Consumer's position in co-signing this complaint with the Cancer Society. Has the basic tenet of impartiality been overlooked here simply because of the controversial nature of the service we provide? We would understand if allegations were being made against those who failed to achieve the generally accepted principles contained within the voluntary Standard – as uncovered by

² 'Sunbed Sting', Trudie McConnochie, Next Magazine November 2010

³ Consumer NZ, Sunbed Mystery Shopper Survey Results, Issue #509, December 2010/ January 2011

⁴ **Appendix A.** Copies of correspondence between GBT and Consumer NZ, 2010.

last year's survey- in fact we'd gladly co-sign the complaint ourselves. But we seriously question the motivations here when the supposedly impartial Consumer advocate group chooses to lay a complaint chiefly against one of the mere 7 NZ sunbed operators who made a perfect score in their survey.

The Complainants categorically state this complaint is based on the results of Consumer's 2010 mystery shopping survey. If that is true, then there is no need for you to read further. Get Brown Tanning received a tick in every box deemed essential as part of the survey. As such, on the basis of the survey, we should never have been included in this complaint- which clearly reaches further than the survey and becomes a separate issue.

We believe the Complainants pursue this particular avenue (under the umbrella of the Fair Trading Act) not to protect an unwitting public, as they claim, but to further their aim of eradicating sunbed services in NZ. As you will see set forth in the rest of this letter, as well as by the submissions from our colleagues here and abroad- the very existence of this complaint is evidence of unwarranted and misguided prejudice. We understand the Complainants are well-intentioned, but as ever we insist that recognising the legitimate right of our industry to offer sunbed services, and working together effectively to develop co-operative, communicative strategies to achieve mutual aims is the only way to improve public health outcomes in a way that is fair to all parties.

REQUEST FOR INFORMATION

1. My name is Tiffany Brown; I am the Managing Director of Get Brown Tanning and am fully authorised to speak on behalf of the organisation.
2. The legal trading name of our operation is Larbro Holdings Ltd t/as Get Brown Tanning.
3. The physical and mailing addresses for our company are:
Physical- 220 Marua Road, Ellerslie, Auckland 1051
Mailing- PO Box 87-058, Meadowbank, Auckland 1051
4. The two other of three directors of the company are Gabrielle Brown and Paul Brown, and the General Manager is René Fowler.
5. The relevant material appeared on our website www.getbrown.co.nz and was voluntarily removed on 13th June 2011. A copy is attached.⁵ The material is

⁵ **Appendix B.** Copy of material removed from Get Brown Tanning website, June 2011

also copied throughout the responses in 7.) in order to support each defended Representation.

6. The material was produced primarily by me.

7. We refute the allegations made by the Complainants that our representations are false or misleading.

Our responses to the allegations made by the Complainants follow this format:

- Firstly we defend the Representations individually in support of their content (**Defending our Representations**).
- Then, we address the specific comments made by the Complainants about each Representation or group of Representations (**Addressing the Complainants' Responses**).

Defending our Representations 1-4

Representation 1

"Are sunbeds safe?"

The comments on our website in response to this 'frequently asked question' follow. The parts omitted by the Complainants appear in blue.

It is almost impossible to say that any human activity is 100% safe, because by definition this means you can do it recklessly (with abandon) and come to no harm. At Get Brown we believe that the benefits of moderate suntanning (producing vitamin D, feel-good endorphins, well-being, confidence-boosting, the psychological stimulus from a meditative 'time-out'...) far outweigh the minimal and manageable risks associated with over-exposure to UV light. It should be remembered that tanning in a non-burning fashion has never been isolated as a causative mechanism for any cancer.

(Analogy to driving a car.)

Why we defend this representation:

- a) We note the Complainants repeatedly omit surrounding and supporting information when quoting the material from our website. We feel many of these omissions are crucial when deciding if there has been a breach of the Fair Trading Act- as they provide important context.
- b) Disturbingly, it is the Complainants and other anti-tanning proponents who repeatedly use the word 'safe' in relation to sunbed use. At Get Brown Tanning we never apply the term 'safe' to the activity of indoor tanning. The question in Representation 1. 'Are sunbeds safe?' was added to our website's information section as a result of repeated public enquiry (*because this is how the public phrase the question*). Our response (just like our spoken answer) is carefully worded because the matter is far from black and white, and a direct response of 'yes' or 'no' is equally incorrect without quantitative information. We make sure to preface our response with 'we believe' making it clear that this is our opinion as opposed to

implying there is a generally accepted consensus about whether 'sunbeds are 'safe' or not'. The query is as nonsensical as the question 'is water safe?' when posed without any qualitative parameters. **Water can cause drowning, but is it correct to answer the question 'No', implying that any interaction with water will cause drowning?**

- c) It is pertinent to mention here the issue of clause 2.12 of our industry's voluntary Standard⁶. We did not agree to the wording of this clause during the revision process which was pushed through to finalise on 31 December 2008.⁷ We (the local industry representatives) suggested the wording be amended to read "Unsubstantiated claims should not be made in the promotion of solaria use." As it reads now, the clause is entirely unworkable. Under the concept of fair trading it is completely unrealistic to expect our business representatives to decline to answer questions or discuss issues with our clients outside of the narrow definition of 'cosmetic' benefits. As such we do not adhere to this particular clause in the salon environment nor on our informative website, and we disclose and discuss this with all our clients.
- d) If the Complainants' intention is to suggest we are promoting non-cosmetic health benefits- we do not agree. All the alleged misleading representations appear on our website to inform interested readers in as balanced and reasonable a way as possible. It is clear that many of the omissions made by the Complainants provide crucial balance to these discussions, when re-included. Further- all the allegations made by the Complainants are taken from the 'Tanning Info/ Frequently Asked Questions' section of our website; they do not appear in any traditional advertising mediums (e.g flyers, brochures, print or radio ads).
- e) During our comprehensive new client consultation process at Get Brown Tanning we document the reasons people first come to our premises for sunbed tanning. Latest figures⁸ from 2011 show the following results:
- o 43% of clients chose to tan for both cosmetic and various other health benefit reasons (*including vitamin D, mood improvement, skin conditions and sunburn prevention*)
 - o 16% of clients chose to tan solely for health benefits (as above)
 - o 42% of clients chose 'sunburn prevention' as a reason for tanning
- This data, combined with our anecdotal experience from countless clients about the reasons they tan- which go beyond the cosmetic effect- leave us with no doubt that there are real and actual benefits to moderate

⁶ Standard AS/NZS 2635:2008 Solaria for Cosmetic Purposes

⁷ Standards NZ, "Solaria Standard committee wins Australia's Outstanding Committee Award." Touchstone July 09 <http://www.standards.co.nz/touchstone/Issue+07/Consumer+Safety/Solaria+Standard+committee+wins+Australias+outstanding+committee+award.htm>

⁸ Get Brown Tanning Ellerslie. 'New Client Data Analysis: Reasons for Tanning.' Excel worksheet, 2011.

indoor sun-tanning that are not purely cosmetic. This guides our policy to discuss these reported benefits with past, present and future clients.

- f) The analogy made to a person driving a car in this Representation shows that if a person chooses to tan indoors, a similar process of precautions can and should be taken to limit the risks involved and maximise the benefits of that activity. As a professional sunbed operator, we take full control of each and every exposure for each and every client visit, ensuring that our sunbed equipment cannot be used recklessly. Every member of staff administering UV light sessions to clients is fully trained to the highest accepted international standard of client care and responsibility to assess skin type variables and set exposure times. Our sunbed equipment is operated by a central panel of remote timers, set by our trained personnel. The vehicle analogy shows that Get Brown Tanning is the driver of this car, while our client is the passenger. We take, and exceed, the exceptional care of each tanner suggested by our voluntary Standard, and as discovered by the mystery shopper sent to our premises in 2010 by Consumer NZ.⁹
- g) This section finishes with the following passage, omitted by the complainants: [A Note On Sunbed Equipment: Sunbed lamps and equipment do vary, and you need to be sure that the equipment you choose to tan in has a reasonable level of UVB radiation and not too much UVA. As a rule of thumb newer, modern sunbed equipment usually conforms to the right mix \(as long as the unit is not a "high pressure tanning unit- avoid these UVA-only sunbeds at all costs!\) and the newer style of lamps actually emit UVA in a more gentle spectrum than sunlight itself. \[link appears here\] Read more about new era tanning lamps vs. the sun.](#)¹⁰ If you have more specific questions [about indoor tanning equipment please contact us](#). We believe this passage supports our commitment to see an improvement in public health outcomes through education- staying at the forefront of research and sharing this with all interested clients and readers- and we feel its omission by the Complainants was intentionally made to inaccurately narrow our comments.

Representation 2

"What about UV light and skin cancer?"

The comments on our website in response to this 'frequently asked question' follow. The parts omitted by the Complainants appear in blue.

[There are several types of skin cancers as outlined below. We can separate them into 'melanoma' and 'non-melanoma' skin cancer. While we often hear the term 'melanoma' attributed to any and all skin cancer; it is important to realise that the two types of skin](#)

⁹ Get Brown Tanning Client Records, UV Consent Forms 2010. Mystery Shopper for Consumer NZ Survey: Miriam Smith, 74 Tiraumea Drive, Pakuranga, ph: 021-735500, miriam.smith01@gmail.com, Skin type II (12.5), First visit 7.9.10, First session 8.9.10 (4 minutes). Reason for tanning: Cosmetic/ trip to Noosa 11/09/10. Skin condition: Dry. Comments: Eczema- trial patch test (Pure Karma) hypoallergenic lotion.

¹⁰ **Appendix C.** Reykdal, P.E and Smith, D.L. 'Sunlight vs Sunbeds: the Truth about UVA.' Virgo Publishing Ltd (Looking Fit magazine)

cancer are extremely different. The most important distinction to make if you are interested in UV light and its effect on the skin is that there has been no statistically satisfying scientific conclusion reached about 'sunbeds' and the incidence of melanoma (despite the skewed facts you may have heard!) In fact, ground-breaking research was recently completed which points to the fact that TANNING may actually inhibit the incidence of melanoma.

Why we defend this representation:

- a) The IARC report quoted by the Complainants (and dealt with further on in this letter) has been parroted in piecemeal fashion by anti-tanning proponents since it was published in 2006. When it is reviewed correctly, our assertion that there has been “no statistically satisfying scientific conclusion reached about 'sunbeds' and the incidence of melanoma” is correct.^{39 39 40 47} (Please also see further comments below under ‘**Addressing the Complainants’ Responses 1-4**)
- b) A large study of over 1000 people published in 2008 looked at the connections between sunlamps, tanning beds and melanoma risk and concluded that “no association with tanning bed use was found”.¹¹
- c) When we refer to ‘TANNING’ inhibiting the incidence of melanoma, we mean tanning in a non-burning fashion- not over-exposure to UV light. The comment refers to a study¹² by researchers at Dana-Farber Institute of Harvard University showing that the genetic ability to tan was a major factor in inhibition of melanoma skin cancer. (A link to this reference will be added to the website if and when these comments are re-published.)
- d) Further research supporting the idea that tanning in a moderate fashion may inhibit melanoma is a study¹³ whose authors concluded “sun exposure might have an anti-melanoma effect through activation of the vitamin D system.”

Representation 3

“Isn’t tanning bad for me?”

The comments on our website in response to this ‘frequently asked question’ follow. The parts omitted by the Complainants appear in blue.

The relationship between sunlight and skin cancer has been blown out of proportion, mainly by the cosmetic wing of the pharmaceutical industry. Sunburn protection products have made extraordinary amounts of money by being cleverly marketed to prevent cancer, as opposed to preventing sunburn. In fact, there is no clear evidence that chemical sunscreens have a protective effect against skin cancer, nor that staying out of the sun reduces your risk of skin cancer or skin aging.

¹¹ Clough-Gorr, K et al, “Exposure to sunlamps, tanning beds, and melanoma risk,” Cancer Causes and Control, Vol 19 Number 7 659-669, 14 February 2008

¹² Rutao, C et al. “Central Role of p53 in the Suntan Response and Pathologic Hyperpigmentation,” Cell, Volume 128, Issue 5, 853-864, 9 March 2007. <http://www.sciencedaily.com/releases/2007/03/070308122006.htm>

¹³ Mocellin, S and Nitti, D. “Vitamin D Receptor Polymorphisms and the Risk of Cutaneous Melanoma: A Systematic Review and Meta-Analysis.” Cancer, Vol 113 Issue 9, 1 November 2008

Why we defend this representation:

- a) First, we defend the statement that the issue has been blown out of proportion. Consider: skin cancer was reported to have had a direct cost to the NZ health system of \$57million dollars in 2009. By comparison, osteoporosis- a bone crippling condition which is (incidentally) vastly improved by maintaining adequate levels of vitamin D (having more sun exposure)- cost an estimated \$1,159million dollars in 2007¹⁴. In 2009 the cost of musco-skeletal disorders was estimated to be more than \$5,570million dollars¹⁵. And consider further: of the total population of mortality in New Zealand for 2007¹⁶ the percentage of deaths from cancer was close to 30%. The percentage of deaths from skin cancer was just 1.02%. As investigative journalist Ian Wishart stated in October 2008¹⁷, “New Zealanders are 30 times less likely to die from skin cancer than from other forms of cancer.”
- b) Second, we defend our opinion that the cosmetic wing of the pharmaceutical industry is mainly responsible, driven by corporate profit-seeking activity. Sunscreens and sunscreen-added cosmetic products are marketed as ‘fear-based purchase’ items to be worn 365 days a year. Even the Cancer Society of NZ now admits there is no need for everyone to wear sunscreen every day of the year.¹⁸ In the USA chemical sunscreen is a US\$5-6 billion dollar industry. Because sunscreen does not prevent melanoma, pharmaceutical industry manufacturers are not allowed to advertise that their chemical sunscreen products prevent melanoma. Instead, pharmaceutical sunscreen producers pay dermatology groups millions of dollars to endorse their products and make that claim on their behalf. The American Association of Dermatologists (AAD) received an estimated US\$6-8 million dollars in 2009 for sunscreen endorsements encouraging the public to consider chemical sunscreen as a daily-use product. The US-based ‘Skin Cancer Foundation’ (SCF) is a marketing group organized by pharmaceutical manufacturers of sunscreen to create a “Skin Cancer Foundation Seal of Approval” which appears on sunscreen products to encourage consumers to think their products prevent melanoma- which they are not allowed to claim themselves given the inaccuracy of the statement. The SCF website says: “For

¹⁴ Ministry of Health. 2009 “Report on New Zealand Cost-of-Illness Studies on Long Term Conditions.” Wellington: Ministry of Health

¹⁵ Bossley, C.J and Miles, K.B, “Musco-Skeletal Conditions in New Zealand ‘The Crippling Burden,’” New Zealand Society of Physiotherapists, May 2009.

¹⁶ Source: Ministry of Health Statistics

¹⁷ Wishart, Ian. “We don’t know what to tell the public”: NZ health officials sitting on cancer bombshell,” TGIF Edition, Vol 1 Issue 9, October 2008.

¹⁸ Cancer Society of New Zealand. Advice Table, “How do I take a balanced approach to sun exposure in New Zealand?” October 2010.

http://www.cancernz.org.nz/assets/files/info/Information%20Sheets/IS_SummerWinterAdviceTable_Oct20101.pdf

adequate protection against melanoma, non-melanoma skin cancers and photo-aging, everyone over the age of six months should use sunscreen daily year-round, in any weather." We say: who benefits from this advice?

- c) We defend our comments that there is no clear evidence chemical sunscreens protect against cancer. On May 24, 2010, AOL News¹⁹ reported on a study released by USA's Environmental Working Group (EWG) warning almost half of the 500 popular sunscreens it had reviewed may be accelerating cancer. Further, the report showed the FDA had known about the issue for as long as a decade without alerting the public. The EWG – an independent consumer watchdog that analyzed hundreds of sunscreen ingredients in this report²⁰- said, "Most sunscreen chemicals are far from innocuous. In sunlight, some release free radicals that can damage DNA and cells, promote skin aging and possibly raise risks for skin cancer. Some act like estrogen and may disrupt normal hormone signaling in the body. Others may build up in the body and the environment." The EWG has since released this year's (2011) report in which their review claims little improvement in the marketplace, and that only 1 in 5 sunscreens available today are deemed to be "safe and effective".²¹
- d) We further defend our comments that there is no clear evidence chemical sunscreens protect against cancer. In 2005 Phillippe Autier- an ultraviolet light expert also quoted by the Complainants- confirmed sunscreens had not been shown to reduce melanoma incidence.²² In 2011 Autier joined the ranks of scientists concerned about sunscreen actually increasing the incidence of melanoma²³ when another study of his found: "Sunscreen use for tan acquisition would thus lead to similar exposure to UVB and greater exposure to UVA, which could explain the slightly higher melanoma risk often found among sunscreen users."²⁴
- e) Sunscreen does not prevent melanoma, according to the U.S. Preventive Services Task Force, which makes policy recommendations for the U.S. federal government: "The evidence is insufficient to recommend sunscreens for the prevention of skin cancer."

¹⁹ Schneider, A. "Study: Many Sunscreens May be Accelerating Cancer." AOL News, May 2010

²⁰ Environmental Working Group (EWG) News Release. "EWG Asks FDA, NTP To Wind Up Study Of Vitamin A In Sunscreen: Government Data Suggests Retinyl Palmitate Is Carcinogenic On Skin Exposed To Sunlight." 28 May 2010. http://www.ewg.org/FDA_Should_Wind_Up_Study_Of_Vitamin_A_In_Sunscreens

²¹ Environmental Working Group (EWG). 'EWG's Skin Deep: Sunscreens 2011.'

<http://breakingnews.ewg.org/2011sunscreens/>

²² Autier P. "Cutaneous malignant melanoma. Facts about sunbeds and sunscreens." *Expert Rev. Anticancer Ther.* 5(5),821–833 (2005).

²³ Garland, Cedric F, et al. 'Could sunscreens increase melanoma risk?' *American Journal of Public Health*, Vol. 82, No. 4, April 1992, pp. 614-15.

²⁴ Autier, P et al, 'Epidemiological evidence that UVA radiation is involved in the genesis of cutaneous melanoma.' *Current opinion in oncology*, March 2011

- f) There is considerable concern from many experts about the use of nanotechnology in sunscreens, and this has been widely reported⁷⁷.

Representation 4

“The good news about UV light (sunlight) and other cancers”

The comments on our website in response to this ‘frequently asked question’ follow. An additional passage omitted by the Complainants appears in blue.

Researchers continue to explore the theory that certain cancers including breast, colon, prostate and ovarian cancers may be INHIBITED by regular sun exposure. One study showed that the risk of breast cancer decreased by 40% in females who were moderate tanners. The effect of vitamin D on general health including the ability to fight degenerative disease including cancers cannot be overlooked. Some dermatologists are still trying to maintain that you can get enough vitamin D from diet alone; but the majority of medical professionals agree that sunlight is the best way to get enough vitamin D, and that we need to teach **UV light in moderation** rather than absolute sun avoidance.

Moderate UV light exposure gives greater protection than no exposure for those who can develop a tan. This negates the myth that ‘no tan is a safe tan’. Parts of the world with higher sunshine have proven to have lower rates of other cancers. In 1941, the American publication ‘Journal of Cancer’ stated that a possible increased risk of non-melanoma skin cancer (from sun exposure) was the price to be paid for the reduced risk of prostate, breast and colon cancer.

Why we defend this representation:

- a) We defend our first statement: the Complainants themselves state that the estimated “protection from a sunbed tan is about the same as using an [sic] SPF2 or SPF3 sunscreen.”²⁵ Therefore, our statement that moderate exposure (or, a sunbed tan) does indeed give “greater protection than no exposure” is correct. At Get Brown Tanning a ‘sunbed tan’ results from ‘moderate UV exposure’, while, obviously, no exposure gives no SPF sunscreen equivalent to the skin whatsoever.
- b) Further- we are careful to include the suffix to this statement: “for those who can develop a tan”. Get Brown Tanning policy is- no UV tanning for any clients whose skin is assessed as skin type 1 on the Fitzpatrick skin type chart, as these clients are at greater risk for skin cancer.²⁶ We strongly discourage any UV exposure for individuals who are unable to acquire a natural tan, as the inability to tan is the number one risk factor for melanoma skin cancer.¹²
- c) Sun Protection Factor (SPF) numbers work roughly like this²⁷: the number on the sunscreen product label can be multiplied by a person’s natural burn time; the resulting number should be the time that person may reasonably

²⁵ Consumer NZ and the Cancer Society of NZ, Complaint to Commerce Commission, February 2011

²⁶ Bataille, V, “Risk Factors for Melanoma Development: Sun Exposure & Sunbeds,” Expert Review of Dermatology, 22 December 2009

²⁷ Jeffries, M. ‘What do SPF numbers mean?’ Discovery Fit and Health, <http://health.howstuffworks.com/skin-care/beauty/sun-care/spf.htm>

stay in the sun wearing the sunscreen product before being at risk of sunburn. At Get Brown Tanning our clients are only skins type 2 or above with by far the bulk of our clients falling into the type 3 category. A skin type 3 person may have a burn time of say, 15 minutes at noontime in the height of summer in NZ (*although this varies hugely depending on heredity, frequency of sun exposure, and numerous other factors*). With this example, if this person has a sunbed-acquired tan from Get Brown Tanning, conservatively giving them a SPF of 2- as confirmed by the Complainants- their burn time is now increased to at least 30 minutes, given extreme UV conditions. So, this person effectively has a 15 minute 'headstart' on their counterpart who has no base tan. (*As anyone living in New Zealand well knows, the advantage of 30 minutes of natural protection in our harsh but often unpredictable summer weather can and does very often mean the difference between sunburn and no sunburn.)* If the Complainants' desire is to see more of the population more 'protected' from sun exposure more of the time, why do they take issue with this clearly demonstrated increase in protection achieved by a sunbed tan as acquired moderately at Get Brown Tanning?

- d) The comment 'no tan is a safe tan' is anti-ultraviolet propaganda most commonly used by groups with a vested interest in dissuading the public from using indoor tanning services. In this case, the Cancer Society of NZ stand to make huge gains from the sale of their branded sunscreens, after-tan and self-tanning products, so they have a clear conflict of interest. We believe this statement can be labelled a 'myth' for its nonsensical nature. As noted in 1b) it is those who continuously attack indoor tanning who use the word "safe" in connection with it. We don't. We take care to explain the biological process of skin tanning to all new clients and on our website.²⁸ We placed this sentence directly after the sentence discussing greater protection from moderate exposure compared to no exposure. Our intention is to underline the fact that because there is a demonstrated benefit to moderate tanning (a SPF2 or 3, as agreed by the Complainants as shown above in 4a) then the commonly heard expression "no tan is a safe tan" cannot be true. It is a convenient but inaccurate leap for the Complainants to assume that if people **don't** believe that "no tan is a safe tan", then people will automatically assume that "tanning **is safe**".
- e) The Complainants are guilty of presuming the general public incapable of making informed choices, even when information is available to them. This can be the only reason they object to our website comments while conceding our operation is the only one in Auckland providing an appropriate service to those seeking a place to tan indoors.³

²⁸ Get Brown Tanning. 'How Does Tanning Work?', Tanning Info section, www.getbrown.co.nz/tanning-info/#A1

- f) "Parts of the world with higher sunshine have proven to have lower rates of other cancers." While we believe this statement to have merit, we concede that it is more accurate to word it as follows: "People who live in parts of the world with less sunshine are more likely to be vitamin D deficient, and consequently more likely to contract and less able to survive other cancers."^{29 30} We are happy to amend this statement if and when it is re-published on our website.
- g) We believe the Complainants have misconstrued the final sentence of this passage. The intent when referring to the 1941 research was not for it to stand up as "the best and most recent evidence" we could provide; rather the implication was that even as long ago as 1941 there were scientists making claims about the 'good news' about UV light and cancer, as the title of the piece refers to. In fact, the Complainants have not referred to the seven references found throughout the 'Info' section of our website, which represent "best" and "recent" evidence for the reader. We take the opportunity to reiterate that it is the Complainants who believe we are seeking to be "reassuring" to interested readers about our services- *presumably to lull them into a false sense of security about tanning*. This is incorrect. Our intention is not to reassure, but to present a more balanced picture of the facts, opinions and debate surrounding the issue than can typically be found elsewhere.

Addressing the Complainants' Responses 1-4

1. 'Are sunbeds safe?'
2. 'What about UV light and skin cancer?'
3. 'Isn't tanning bad for me?'
4. The good news about UV light (sunlight) and other cancers

(The Complainants' Response to these Representations:)

There is no evidence to show that sunbed use offers any health benefits. On the contrary, sunbeds emit UV radiation. Exposure to UV radiation is a major cause of skin cancer, and may also lead to the development of cataracts and other eye conditions, and premature skin ageing.

The 2006 IARC review of the health effects of sunbeds found that: people who have ever used as sunbed have a 15% increased risk of melanoma; people who first used a sunbed before the age of 35 have a 75% increased risk of melanoma.

We also think it's misleading to quote research published in 1941. If this is the best and most recent evidence they can provide it's not reassuring.

²⁹ Grant, W. B. Garland, C. F. "The association of solar ultraviolet B (UVB) with reducing risk of cancer: multifactorial ecologic analysis of geographic variation in age-adjusted cancer mortality rates." *Anticancer Res.* 2006 Jul-Aug; 26 (4A): 2687-99.

³⁰ Grant, W. B. "An estimate of premature cancer mortality in the U.S. due to inadequate doses of solar ultraviolet-B radiation". *Cancer.* 2002 Mar 15; 94 (6): 1867-75.

We say (1):

- i. Radiation from UVB sunbed-induced ultraviolet light radiation has been shown to stimulate the production of vitamin D^{31 32}. According to the Cancer Society of NZ- among myriad others- vitamin D is essential for good health: "Adequate vitamin D status is essential for general health, particularly for bone, joint, muscle and neurological function."³³
- ii. The Complainants' statement that sunbed use offers no health benefits would only be correct when applied to sunbed equipment that did not emit UV light in the UVB spectrum. All sunbed equipment at Get Brown Tanning emits UV light in both the UVA and the UVB spectrum via '160watt Traditional' and '160watt New Era' sunlamps, and therefore it is a fact that vitamin D is made in human skin in response to UV light radiation in our sunbed equipment. Research by the Non-Ionizing Radiation Research Institute (NIRRI) confirms not only the fact of this vitamin D production, but also the improvement in vitamin D synthesis by comparison to NZ summer sun: "the "average" 160w sunlamp (6.59 RS [Relative Strength]) has about twice the vitamin D-effective power as the NZ Summer Sun (3.21 RS)..."³⁴
- iii. Hundreds of thousands of tanners around the world who use professional indoor tanning facilities for myriad reasons with no adverse results, in our opinion, constitute strong evidence of the health benefits of sunbeds. At Get Brown Tanning **43%** of our clients chose to tan for health reasons as well as for cosmetic benefits, according to latest data⁸.
- iv. We agree "sunbeds emit UV radiation", and insist no implication should be made about this fact without appropriately qualitative information. For example, every time the word 'exposure' appears it must be replaced with 'over-exposure' to ultraviolet light when discussing any negative effect on humans. No research has implicated moderate exposure to UV light with any negative effects. We note the absence of any such evidence from the Complainants.
- v. The voluntary Standard for operation of sun-tanning units in a commercial operation in NZ⁶ notes in its preface that there is "new evidence" showing an increased risk between solaria use and skin cancer. However, when the 16 applicable studies are examined, 11 did not attempt to ascertain a relationship between solaria use and skin cancer at all. Of the five

³¹ Moan, J et al, "Sunbeds as vitamin D sources," Photochemistry and photobiology (2009 Nov-Dec):85(6):1474-9.

³² Tangpricha V, et al. "Tanning is associated with optimal vitamin D status (serum 25-hydroxyvitamin D concentration) and higher bone mineral density." *The American Journal of Clinical Nutrition* 80, 1645-9 (2004)

³³ The Cancer Society of NZ. 'Reducing Your Cancer Risk' <http://www.cancernz.org.nz/reducing-your-cancer-risk/sunsmart/vitamin-d/>

³⁴ **Appendix D.** Smith, Donald L. 'NIRRI Online News: Memo to the New Zealand Commerce Commission in response to the complaint made by the Cancer Society and Consumer NZ on February 7 2011: We Say (2).' Non-Ionizing Radiation Research Institute, Tuscon, AZ.

remaining, only one³⁵ used newly acquired data (as opposed to re-examining old data). This study concluded that “melanoma risk in association with... artificial sun exposure is small compared with phenotypic risk factors”. A large North American study¹¹ of over 1000 people also looked at the connections between sunlamps, tanning beds and melanoma risk and concluded that “no association with tanning bed use was found.”

- vi. The Complainants refer to eye damage and premature skin ageing, both of which we find irrelevant to the allegations. Get Brown Tanning was one of only seven indoor tanning operators surveyed by Consumer NZ³ to fulfil all the requirements as deemed by the reviewer⁹, including providing appropriate eyewear to the client, gaining informed consent by way of a mandatory consent form and consultation process, and full disclosure and discussion of the considerations for skin dehydration and ageing associated with over-exposure to UV light. We also voluntarily include a full section in our initial consultation and on our website³⁶ on the importance of using high-quality, hydrating and antioxidant-rich pre and post-tan lotions. This advice continues on a regular and ongoing basis with our clients.
- vii. The Complainants quote the IARC review of 2006³⁷. We say the following about that review:
 - a. In actuality, the IARC systematic review found inconsistent results from reviewing a selection of studies examining various relationships between skin cancer and exposure to UV light from various sources. For example, the studies did not support any association whatsoever between sunbed use and basal cell carcinoma skin cancer. Basal cell carcinoma is the most commonly diagnosed form of skin cancer, but there was no evidence found in this apparently conclusive review to connect it with sunbed use. This fact alone clearly indicates the relationship between sunbed use and skin cancer is not clear-cut. Further, while the review noted an increase in the incidence of melanoma depending on ‘ever-use’ of a sunbed, there was “no consistent evidence of a dose-response relationship”. This means that the analysis suggested you were more likely to get melanoma skin cancer if you’d **ever** used a sunbed, but if you **consistently** used one then you were **not** more

³⁵ Bataille V. et al, “Exposure to the sun and sunbeds and the risk of cutaneous melanoma in the UK: a case-control study.” Eur J Cancer 2004

³⁶ Get Brown Tanning. ‘What About Tanning Lotions, Tanning Accelerators, and Tanning Extenders?’ Tanning Info section, <http://www.getbrown.co.nz/tanning-info/#C>

³⁷ The International Agency for Research on Cancer Working Group, “The association of use of sunbeds with cutaneous malignant melanoma and other skin cancers: A systematic review (2006),” International Journal of Cancer (March 2007): Vol 120 Issue 5 p1116-1122.

likely to get it. Again, this kind of conflicting information is proof of the unreliability of any of the conclusions drawn by the study.

- b. The review made no allowance for the professional salon operations like Get Brown Tanning where skin type 1 people are excluded. The data has since been reviewed³⁸ adjusting for this confounding factor and now shows no statistically significant correlation between melanoma skin cancer and sunbed use, other than for Fitzpatrick skin phenotype 1s. As skin type 1 people are prohibited from using UV tanning units at Get Brown Tanning, this study is rendered irrelevant to any discussion of the risks involved for the particular demographic of clients using sunbed services at our premises.
- c. William Grant- expert ultraviolet light researcher and author of the paper above- went on to conclude in a further critical study³⁹ of the IARC review:

“This meta-analysis of the association of CMM risk [cutaneous malignant melanoma] with respect to sunbed use by the IARC does not support the evidence that sunbed use is a risk factor for CMM when the confounding factors of skin phenotype and latitude are considered. The IARC study only claims association, not causality, and the criteria for causality do not appear to be satisfied. In addition, sunbed use produces vitamin D, which has many health benefits. Thus, prohibiting sunbed use other than to those with skin type I based on the IARC study seems ill advised.”

- d. The IARC review also made no allowance for the mix of sun-tanning equipment reviewed. ‘At-home’ tanning units (where limited or no restrictions can be assumed to be in place) were included in the study, as were dermatologist-office-based units. UV light emitting devices used by dermatologists mostly deliver extreme ‘over-exposing’ doses of either UVA or UVB radiation in the treatment of skin disorders, and their inclusion in the study data thus skews the results. The commercial sun-tanning units like those at Get Brown Tanning were not separated in the IARC review, but when the equipment is separated, no statistically significant increase in risk of melanoma skin cancer from use of sunbeds is found.⁴⁰ *(A local NIWA study’s⁴¹ results were equally skewed by the inclusion of two UV-light emitting devices from an Auckland dermatologists’ clinic.*

³⁸ Grant, W.B. “Insufficient evidence exists to link sunbed use to risk of melanoma for other than those with skin phenotype 1.” Sunlight, Nutrition, and Health Research Center (SUNARC), March 2007.

³⁹ Grant, W.B. “Critique of the International Agency for Research on Cancer meta-analyses of the association of sunbed use with risk of cutaneous malignant melanoma.” *DermatoEndocrinology*. 2009 Nov-Dec; 1(6): 294–299.

⁴⁰ **Appendix E.** Joint Canadian Tanning Association (JCTA). ‘Home Tanning Units and Medical Devices Were The Real Risk in the WHO-IARC Report: A Closer Look at the Data’. 2009.

⁴¹ Johnston, P.V. and McKenzie, R.L. “Calibration of Solaria.” National Institute of Water and Atmospheric Research (NIWA), Lauder, Central Otago, NZ. <http://www.niwa.co.nz/?a=103495>

Disturbingly the result of the paper was to average the results across 4 pieces of equipment, when only two were actually units that might be found in a NZ sunbed salon. Because the dermatologist 'chambers' produced a huge spectral skew- including these rendered any conclusions highly inaccurate as a basis to comment on NZ sunbed equipment.) Because of the failure to separate the equipment, the study is irrelevant to any discussion of the risks involved for clients using the sunbed equipment at Get Brown Tanning.

- e. The IARC is a division of the World Health Organisation (WHO). The WHO cannot be considered to be a credible source of information on this topic for the following reasons:
- 1) The WHO recently re-classified UV light from sunbeds from 'probably carcinogenic to humans' to 'definitely carcinogenic to humans' despite the fact that UV light from the sun had been classified as 'definitely carcinogenic to humans' for several decades already. Further- the IARC monographs⁴² advising on the carcinogenic nature of certain substances cannot be considered as tools for the recommendation of behaviours, for the simple reason that they contain no qualitative specifics on dosage or quantity. **(For example, alcohol is 'definitely carcinogenic' but does that mean one is likely to get cancer after consuming one can of beer?)**
 - 2) The WHO is guilty of failing to adequately inform and protect the public from the carcinogenic effects of the oral contraceptive pill. The 'pill' is also classified as 'definitely carcinogenic to humans'. Why, when prescribing the pill, are doctors not required to gain written informed consent from the patient, or even advise of the carcinogenic nature of the pharmaceutical product?
 - 3) The WHO is guilty of failing to adequately inform and protect the public from the carcinogenic nature of alcohol. Alcohol is 'definitely carcinogenic to humans', yet the WHO's guidelines on alcohol consumption are woefully inadequate. As a major contributor to human cancer, why is the WHO not actively and strongly campaigning for global prohibition?
 - 4) The WHO is guilty of failing to adequately inform and protect the public by advising (at least) mandatory consent for those entering the hairdressing, shift-working or painting professions. These three professions are defined in the IARC monographs as 'probably', 'probably' and 'definitely' carcinogenic to humans, respectively. To our knowledge, no such consent is required. (We approached four of NZ's leading hairdressing training institutions-

⁴² World Health Organisation. 'IARC Monographs on the Evaluation of Carcinogenic Risks to Humans'. <http://monographs.iarc.fr/>

neither on the phone nor in their application packs were we advised of the carcinogenic risk of this profession.)

- 5) In light of the above, the WHO lost all credibility as an informative global voice on skin cancer when it sanctioned a press release in 2010 announcing the re-classification of UV light from sunbeds into the primary carcinogenic category, and linking that re-classification to the substances arsenic and mustard gas, an unnecessarily 'alarmist' link when it is considered that alcohol and the contraceptive pill (among numerous others) also belong to the 'definitely carcinogenic to humans' list on the IARC monographs. Such inconsistency in the delivery of information on carcinogenic substances is unfathomable- the WHO is either completely misguided, or has a vested interest in damaging the reputation and livelihood of the commercial sun-tanning industry- either of which points to a lack of credibility on this issue. As such the directives issued by the WHO should be viewed as compromised and unreliable when assessing their relevance to the provision of sunbed services at Get Brown Tanning.
- f. The statistics from the IARC review quoted by the Complainants are based on a calculation of relative risk, as opposed to absolute risk. The numbers cause unnecessary alarm. *To take an example: if, one year- 2 out of 100 people break their legs, and the next year, 3 out of 100 people break their legs- the relative risk statistic can then be published as 'people are now 50% more likely to break their legs'. In reality, the actual risk of breaking your leg is still only 3%, as opposed to 2% the year before. Amazingly, this is the kind of 'statistics-manipulation' regularly employed by anti-tanning proponents and the media. Some have found the truth, however, and have made attempts to shed light on the matter. Hiran Rantnayake studied the report closely and said the following in a subsequent article⁴³:*
- "The report's strongest study – which followed more than 100,000 women over eight years – found that less than three-tenths of 1 percent who tanned frequently developed melanoma while less than two-tenths of 1 percent who didn't tan developed melanoma. Almost all the other studies in the report did not establish a strong link between the two."*
- Ivan Oransky, MD, editor of Reuters Health and treasurer of the Association of Healthcare Journalists- joined the chorus about the manipulation of relative risk statistics in the IARC report.⁴⁴ Other commentators also agreed⁴⁵.
- g. The clearly conflicting results in the IARC review confirmed what science already knew: that no causal link between melanoma skin

⁴³ Hiran Rantnayake, "Law Curbs Teen Tanning", The News Journal Delaware, 4 Mar 2010

⁴⁴ Oransky I. "Tanning Beds: What do the numbers really mean?" Association of Healthcare Journalists, May 2010

⁴⁵ Basham, P & Luik, J. "Let's put cancerous myths to bed." Spiked-online.com. 28 April 2010.

cancer and exposure to UV light has ever been found. The data establishes a correlation only. According to the Cancer Society and their colleague association Cancer Research UK: "It's not enough for scientists to discover links between lifestyle factors and cancer risk. They must also understand the biology behind those links."⁴⁶ They go on to recommend: "If scientists find a correlation (link) between a lifestyle factor and cancer, this does not mean that one causes the other." We wonder why the Complainants are so quick to choose to base their advice on one inconclusive review when, elsewhere in their own recommendations, the public are being advised to be wary of such unreliable information?

- viii. When the Complainants quote these 'alarming' IARC report statistics out of context, they are not only skewing the actual results of the study, they are also exploiting the confusion around skin cancer and its relationship with UV light. There are 3 types of skin cancer, and only two of them have been demonstrated to show a causative connection with over-exposure to UV light. The third type, the most deadly form of skin cancer- melanoma- has no such causal link⁴⁷.
- ix. We believe the lack of causation between UV light and melanoma skin cancer is so important because melanoma is the most dangerous and most often fatal form of skin cancer, while basal and squamous cell skin cancers are easily detected and treated, and rarely fatal. As Cancer groups the world over are quick to tell us, awareness and early detection are always key to successful survival outcomes for cancer. Professional sun-tanning establishments like Get Brown Tanning are therefore in an ideal position to advise, educate and encourage sun-seekers to adopt the sensible practice of regular skin-checking and limiting their exposure to UV light when appropriate, and by appropriate means. If these same sun-seekers do not receive this advice from us because they are frightened away from indoor tanning, they will continue to seek the sun outdoors, where they are much more likely to suffer sunburn and skin damage, and where no professional tanning consultant is on hand to dispense sensible sun exposure advice.
- x. Other leading experts agree moderate UV exposure in an indoor tanning environment can be beneficial, for those who choose to do so.^{3148 49 50}

⁴⁶ Cancer Society NZ, Information Sheet, Oct 2010. 'How to make sense of the mixed cancer messages in the media.'

⁴⁷ International Smart Tan Network, 2006, 'White Paper- Research Shows No Connection Between Tanning and Melanoma: Why This Is Misunderstood.'

⁴⁸ Oliver, Dr. Tim, "Top cancer doctor says you should have a sunbed session," Daily Mail online, 24 Jan 2009. <http://www.dailymail.co.uk/health/article-1127175/Top-cancer-doctor-says-SHOULD-sunbed-session.html>

⁴⁹ Sorenson, Marc. "ABC News - Vitamin D from UV Exposure can decrease cancer by up to 80%" <http://www.youtube.com/watch?v=9xuz02ei3Eg&feature=share>, 25 Feb 2010

- xi. Please refer to section 4g) above for comments on the inclusion of a reference to 1941 science on our website. The Complainants have misconstrued the inclusion as an intention on our part to reassure people about tanning on the basis of 70 year old research. Clearly, it actually shows that potential benefits of UV light exposure have been known about for decades. We are willing to include further references to historical confirmation of the power of 'heliotherapy' in order to underline this point, if and when the passage is re-published on our website. *(These span all the way back to the Classical period- and, of course, include the awarding of a Nobel prize for 'phototherapy' to Niels Ryberg Finsen in 1903.)*

Defending our Representation- 5

Representation 5

"What's [so] great about vitamin D?"

The comments on our website in response to this 'frequently asked question' follow. (This was arbitrarily summarised by the Complainants.)

Vitamin D is actually a hormone which is produced by the body in response to sunlight exposure. UV light (sunlight) is the body's only natural, reliable source of vitamin D, as it is difficult to get sufficient levels of the vitamin through diet alone. Until recently it was recommended that people should get 1000IU of vitamin D3 per day, which is about as much as most people make during an average tanning session. A glass of milk, on the other hand, delivers about 100IU. The issue of daily recommended dosage of vitamin D is currently under debate; with most pro-vitamin D health professionals now upgrading the RDI to 2000IU per day. Vitamin D is critical for bone health as it is necessary for our bodies to use calcium effectively. You can drink all the calcium-enriched milk and eat all the cheese you like, but if you don't have adequate vitamin D in your body, you won't be able to use that extra calcium properly. A deficiency in vitamin D caused by lack of sun exposure increases the risk of bone diseases such as osteoporosis, osteomalacia and rickets in children. Older people are especially at risk of developing osteoporosis, which leads to an increased risk of fractures from weaker bones and puts them at risk of serious injury and ill-health. Vitamin D regulates blood pressure and may help reduce risk of hypertension, stroke, diabetes, heart attack and heart failure. A 2008 study found that people with the highest levels of vitamin D are 21 per cent less likely to die of any cause than people with the lowest.

Vitamin D improves insulin production and is strongly linked with preventing diabetes. Increasing vitamin D levels in the bloodstream also helps lower the risk of several diseases- particularly those caused by abnormal cell growth (e.g breast, prostate and colon cancer).

You are most at risk of being vitamin D deficient if you are darker-skinned (you need more sun exposure to make vitamin D; essentially humans become whiter when they need more vitamin D), if you are obese (vitamin D gets trapped in layers of fat and doesn't perform as efficiently) or if you get very little sun exposure (those who wear

⁵⁰ Holick, Dr. Michael F. "Indoor Tanning, Are There Healthy Benefits?"
http://www.youtube.com/watch?v=p3es0Xl_6SE&NR=1 11 Mar 2010

sunscreen at all times, elderly people and children who are not allowed adequate non-sunscreen sunlight exposure time.)

Are you getting enough VITAMIN D? Regular tanners make plenty of it, but those who stay out of the sun are at risk of deficiency. Read more about this important topic here! [link to http://www.tanningtruth.com/index.php/vitamin_d_sunshine_vitamin/]⁵¹

If you are interested in this topic of research, we highly recommend you read *The UV Advantage*, by Dr Michael Holick, professor at Boston University School of Medicine. You can purchase this via Amazon through our website [link to our Books section].

Planning on getting your vitamin D outside? Remember this rule-of-thumb: your shadow must be shorter than you to synthesise vitamin D effectively.

Why we defend this representation:

- a) We note the Complainants have misconstrued the title of this question by transcribing it incorrectly ('What's great about vitamin D?'). The Frequently Asked Question appears on our website as 'What's so great about vitamin D?' The meaning is therefore altered. We are not promoting the favourable characteristics of vitamin D for their own sake; rather we are discussing the topical news and information available. Given the connection between vitamin D and ultraviolet light our clients repeatedly show interest in the topic- and it is obvious that we do so.
- b) We defend the content of this representation vigorously; the groundswell of interest in the field of vitamin D research over the last decade cannot be denied. The Cancer Society of NZ agrees with the importance of the emerging field of positive vitamin D literature. In 2008, Dr. Jan Pearson said, "As the Cancer Society, we are very aware that this is a growing body of evidence."¹⁷
- c) The Cancer Society has recently amended many of its recommendations with regard to sun exposure in terms of vitamin D. Despite quoting the Institute of Medicine's (IOM) recent report⁵² stating that vitamin D supports bone health but not other health conditions- the Cancer Society's own website claims that the "...possible benefits [of vitamin D] include protective effects against various cancers, heart disease and some auto-immune disorders."⁵³ The Complainants clearly also agree vitamin D is supportive of bone health. Should we conclude the Society is just confused about whether vitamin D is really important or not?
- d) If vitamin D is not helpful for any condition apart from the bones- as suggested by the Complainants- we wonder why the pharmaceutical

⁵¹ International Smart Tan Network, Tanning Truth website, www.tanningtruth.com.

⁵² Institute of Medicine of the National Academies. "Dietary Reference Intakes for Calcium and Vitamin D." November 2010.

⁵³ Cancer Society of New Zealand. "Ultraviolet Radiation and vitamin D- a Special Note for People with Dark Skin." Feb 2010. http://www.cancernz.org.nz/assets/files/docs/info/Information sheets/IS_Dark%20skin_April2010.pdf

industry is surging forth with the development of vitamin D-mimicking drugs?⁵⁴

- e) In 2009, over 3000 peer reviewed academic studies were published worldwide showing a positive correlation between vitamin D status and reduced risk of diseases. There are 826 highly cited and recent papers on UVB and/or Vitamin D and cancer.⁵⁵
- f) Not-for-profit group 'People Against Cancer' refers to Vitamin D as a 'miracle from the sun' and says: "The benefits of vitamin D now fills volumes. So far reaching are the benefits of Vitamin D that it has prompted some scientists to call it a magic bullet."⁵⁶
- g) Groups now dedicated to the promotion of vitamin D with a view to improving public health the world over include but are not limited to: the Vitamin D Council⁵⁷, Grassroots Health⁵⁸, the Sunlight, Nutrition and Health Research Centre⁵⁹, the Sunlight Research Foundation⁶⁰, and the UV Foundation⁶¹.
- h) Professor Johan Moan, et al published a report in 2009 which concluded: "To maintain a summer level [of vitamin D] through the winter, when no vitamin D is produced by the sun in northern countries, one should consider increasing the recommended intake of vitamin D significantly, or encouraging the population to get moderate, nonerythemal sun bed exposures."³¹

Addressing the Complainants' Response to Representation 5

5. What's so great about vitamin D?

(The Complainants' Response to these Representations:)

There are many conflicting messages about the benefits of vitamin D. To help clarify the issue the US and Canadian governments asked the US Institute of Medicine to assess the current evidence on health outcomes associated with vitamin D (and calcium). The committee assessed more than 1,000 studies and reports and listened to testimony from scientists and stakeholders before making its conclusions. The report published in November 2010 found the evidence supported a role for these nutrients in bone health but not in other health conditions, which included cancer, cardiovascular disease and hypertension, diabetes and immune function. [link to the report brief]. This conclusion is also supported by the UK Consensus Vitamin D Position Statement (2010), developed by seven national health agencies.[link]

⁵⁴ Sardi, Bill. 'Join the vitamin D revolution now.' Knowledge of Health, March 2011.

<http://knowledgeofhealth.com/join-the-vitamin-d-revolution-now/>

⁵⁵ Grant, W.B. 'Highly Cited and Recent Papers on UVB and/or Vitamin D and Cancer'. 1937-2008.

http://mercola.fileburst.com/PDF/703-highly_cited_vitamin_D_cancer%5B3%5D.pdf

⁵⁶ People Against Cancer: Finding the Best Cancer Treatment. 'Vitamin D- A Miracle From The Sun.'

<http://www.PeopleAgainstCancer.net/>

⁵⁷ The Vitamin D Council. <http://www.vitamindcouncil.org/>

⁵⁸ Grassroots Health: a Public Health Promotion Organisation. <http://www.grassrootshealth.net/>

⁵⁹ The Sunlight, Nutrition and Health Research Centre. <http://www.sunarc.org/>

⁶⁰ Sunlight Research Foundation. <http://www.sunlightresearchfoundation.nl/>

⁶¹ UV Foundation: Ultraviolet Light Research and Education. <http://www.uvfoundation.org/>

We say (2):

- i. We do not accept the IOM report as relevant to this issue primarily because it only reviewed the effects of vitamin D from supplements (pills) or food sources, while excluding the effects of sunshine/ ultraviolet light-induced vitamin D. In debating the issue of vitamin D production through sunbed-induced vitamin D, it is therefore immaterial.
- ii. Vitamin D experts the world over were disappointed with the outcome of the IOM report, and felt despite the increase in daily recommended doses of vitamin D- the levels recommended are still woefully inaccurate and inadequate.^{62 63 64 65} Anthony W. Norman, Emeritus Professor, University of California Riverside, wrote: "The IOM's latest recommendations are largely inconsequential. The IOM committee ignored the consensus of hundreds of vitamin D research scientists and nutritionists from at least twenty-five countries."
- iii. William Grant noted that while the outcome of this particular report was to urge caution about the potential benefits of vitamin D despite the volume of supporting clinical trial information, the FDA "approves pharmaceutical drugs based on only one good randomized controlled trial".⁶⁶
- iv. Since the publication of the IOM report, a February 2011 study⁶⁷ published in Anticancer Research revealed that much higher intakes of vitamin D were required than originally thought by scientists to reduce cancer risk. Lead author Cedric Garland commented:

"I was surprised to find that the intakes required to maintain vitamin D status for disease prevention were so high -- much higher than the minimal intake of vitamin D of 400 IU/day that was needed to defeat rickets in the 20th century."
- v. In June 2011 the Endocrine Society (established in 1916 and "the world's oldest, largest and most active organisation devoted to research on hormones and the clinical practice of endocrinology") issued clinical practice guidelines⁶⁸ for vitamin D screening, effectively over-riding the recommendations of last year's IOM report.

⁶² Cannell, JJ. Commentary on IOM Report at Vitamin D Council website. <http://www.vitaminCouncil.org/fnb-vitamin-d-report-views-and-commentaries.shtml>.

⁶³ Jannet Huang, MD, FRCPC, FACE, ABIHM, NCMP, CCD. "Missing the Mark for Preventative Health"- Institute of Medicine New Recommendations on Calcium and Vitamin D Intake Fall Short. December 2010. <http://www.thecenterforoptimalhealth.org/services/endocrinology/calcium-vitaminD-1210.pdf>

⁶⁴ Vieth, Reinhold. 'Critique of the Considerations for Establishing Tolerable Upper Intake Levels for Vitamin D.' Pathology and Laboratory Medicine, Mt Sinai Hospital, Toronto, Canada. 2010. <http://www.direct-ms.org/pdf/VitDVieth/Vieth%20Critique%20UL%20Vit%20D.pdf>

⁶⁵ Grassroots Health Organisation. 'Quotes on the State of Vitamin D Science, Reference to IOM Report from the D*Action Panel of Vitamin D Scientists/Researchers'. November 2010. <http://www.grassrootshealth.net/iomquotes>

⁶⁶ Grant, William B, Phd. "Comments on Dietary Reference Intakes for Calcium and Vitamin D for the Vitamin D Council." 1 December 2010. www.vitaminCouncil.org/grant-statement-fnb-vitamin-d-report.shtml

⁶⁷ Cedric F. Garland, et al. "Vitamin D Supplement Doses and Serum 25-Hydroxyvitamin D in the Range Associated with Cancer Prevention." Anticancer Research, 2011; 31: 607-612.

⁶⁸ The Endocrine Society, News Release. "Experts Recommend Screening for Vitamin D deficiency in At-Risk Populations." 6th June 2011.

Defending our Representation- 6

Representation 6

“Be wary of sunscreen”

The comments on our website as part of a response to a ‘frequently asked question’ follow. The parts omitted by the Complainants appear in blue.

PLEASE REMEMBER! For the body to make vitamin D naturally, the skin needs moderate (non-burning) exposure to sunlight without sunscreen. The part of the sunlight spectrum that makes vitamin D is UVB, so wearing a UVB-blocking sunscreen will not allow you to make vitamin D. Equally, using indoor tanning equipment that ONLY emits UVA rays (e.g "high pressure" tanning units) will not produce any vitamin D.

Be wary of sunscreen: it **may not be [the Complainants wrote ‘it’s not]** the elixir of youth nor the cancer cure-all that it pretends to be... [Read about one woman's boomerang journey away from the sun and back again here. \[link\]](#) ⁶⁹

Why we defend this representation:

- a) As you can see by the above omissions, the Complainants have once again intentionally neglected to show the balanced, educational nature of this Representation.
- b) We defend these statements because for years at Get Brown Tanning we have grown concerned about peoples' confusion over vitamin D synthesis and sunscreen. Very few people sufficiently understand the spectrum of UV light as it applies to the biology of tanning, sunburn and vitamin D synthesis. Nor do they have a good understanding of the mechanism of sun-screening or sun-blocking products- how they are rated and how they work on the skin. We contend many people may now spend more time in the sun than they reasonably should because sunscreens ‘lull them into a false sense of security’ about how long they can stay out.⁷⁰
- c) Get Brown Tanning carries for sale a complete range of SPF sun-blocking and sun-screening items- so it is hardly in our interest to promote the idea that sunscreen should not be used. Rather; these comments demonstrate our desire to educate about how these products work, how they should be used⁷¹, and to inform on the dangers of ‘365-days-of-the-year’ sunscreen application, which have recently been highlighted in the media.^{69 72}
- d) People who are following the guidelines of the Cancer Society and others- to get sun exposure to the face and arms for about 5-10 minutes

⁶⁹ Coleridge, Georgia. “How slapping on the sunscreen nearly ruined one woman’s health.” Daily Mail, 8th April 2010. <http://www.dailymail.co.uk/femail/article-1264332/How-sunscreen-turn-old-woman.html>

⁷⁰ Indoor Tanning Association of NZ (INTANZ). “SunSmart: Not So Smart?” 22 October 2008. <http://www.scoop.co.nz/stories/GE0810/S00106.htm>

⁷¹ Get Brown Tanning. “Tanning Info: Sunscreens, sunblocks, suntan lotions: which SPF is right for me?” Sun Product Chart Guide. <http://www.getbrown.co.nz/tanning-info/#D5>

⁷² Paltrow, Gwyneth. “GOOP Newsletter: Do: Vitamin D.” 2010. <http://goop.com/newsletter/88/en/>

per day- are not being appropriately advised that wearing sunscreen while doing so can inhibit most of their vitamin D production.⁷³

- e) Phillippe Autier, the UV light expert also referred to by the Complainants, headed a study in March this year (2011) which found that while “...sunscreen use may extend sun exposure intended for getting a tan... it does not necessarily decrease sunburn occurrence.”⁷⁴
- f) At Get Brown Tanning we believe we are well-placed to offer advice to interested people about all aspects of UV light exposure, and we don't shy away from delivering these messages, even when they seem complicated. Groups like the Cancer Society seem to prefer to keep people in the dark, because they believe the public are unable to disseminate complicated information.¹⁷
- g) There is no evidence that regular use of sunscreen can slow down the natural process of ageing. Manufacturers of chemical sunscreen are guilty of constant deception in their advertising of sunscreens when they promote this idea. We defend the right to disagree by way of the comment: “sunscreen may not be the elixir of youth... it pretends to be.”
- h) We defend the comment that sunscreens “may not be the cancer cure-all” they pretend to be either. Chemical sunscreens have not been shown to reduce the likelihood of getting skin cancer, and this has been extensively discussed in Representation 3.

Addressing the Complainants' Response to Representation 6

6. Be wary of sunscreen

(The Complainants' Response to these Representations:)

The evidence is unclear about how much vitamin D is inhibited by sunscreen use. A review of published studies concludes that while sunscreens can significantly reduce the production of vitamin D under strictly controlled conditions, “normal usage does not generally result in vitamin D insufficiency[link]”. Skin can burn in less than 15 minutes in the midday summer sun and to suggest consumers be wary of wearing sunscreen is potentially a very dangerous statement.

We say (3):

- i. Ironically the ‘dangerous’ sentiment the Complainants believe is hidden in our comments about sunscreen is the very word we would apply to the prevailing attitude that chemical sunscreen should be used all year by most people. The Cancer Society recently revised its own guidelines on sunscreen use- finally admitting that certain skin types year-round, and everyone at certain times of the year, may not need to use chemical sunscreen. But the message imparted through advertising, media and at the heart of the ‘Slip Slop Slap’ message remains the encouragement of excessive use of sunscreen. Why excessive? Because the public message

⁷³ Reid, Sexton. “Slip, slop, crack: the vitamin D crisis.” The Age. 9 December 2007. <http://www.theage.com.au/articles/2007/12/08/1196813083745.html>

⁷⁴ Autier, P et al, ‘Epidemiological evidence that UVA radiation is involved in the genesis of cutaneous melanoma.’ Current opinion in oncology, March 2011

does not focus on using sunscreen simply to prevent sunburn. Rather, people are encouraged through the summer months to apply sunscreen whenever their skin will receive sun exposure. This does not fit with the vitamin D message the Cancer Society are also now trying to promote, and has given rise to a difficult situation for those advising on outdoor skincare. In 2008 Wade Beckman (Health Sponsorship Council) and the Cancer Society's Dr Jan Pearson admitted they were taking the issue of vitamin D very seriously¹⁷. Dr Pearson said:

"The public can only cope with fairly basic messages... what it's actually coming down to is it's almost like we all need to know exactly what our skin type is, exactly where we live, what the UV index is each day, and therefore how many minutes to expose ourselves so we get our vitamin D. At the moment... we have yet to come up with a simple way of informing New Zealanders with that information."

Too hard? What Dr. Pearson has discussed here is exactly what happens at Get Brown Tanning, and has happened for the last seven years. Once skin type is assessed, the controlled nature of the indoor UV environment means we can administer the exact doses of UV light required to build a natural tan or to synthesise vitamin D, without the aforementioned unpredictability that makes acquiring sufficient vitamin D outdoors so risky.

- ii. The Complainants note "skin can burn in less than 15 minutes in the midday summer sun." We disagree. A skin type 2 person can, in fact, easily burn in **5 minutes or less** in very strong sunlight. We know this from the countless clients we have consulted with who use sunbed services to acquire a natural level of protective facultative pigmentation (i.e a tan) in order to be more protected in the outdoor UV environment. The Complainants assert that our comments about sunscreen are misleading- claiming them to be "potentially... very dangerous." We feel it is dangerous in the extreme that groups like theirs, concerned with public health welfare- and considered by the general public to be reliable sources of good information on health issues- are repeatedly willing to make sweeping generalisations about skin and sun exposure, despite their knowledge that such generalisations are often false and misleading. Skin types vary hugely in both the level of exposure that will cause sunburn, and that is required for vitamin D synthesis. In NZ's multi-cultural society this is especially true. Even the Cancer Society now admits people with very dark skin do not need to wear sunscreen⁵³.
- iii. The Complainants- rather hysterically- infer we are suggesting people should be wary of wearing sunscreen at all, but this is clearly not the case when the comments are viewed in context. We defend our right to encourage people to be wary of slathering on chemical sunscreen 365 days of the year, without understanding what is in it, how it works on the skin, or how it may affect their health.

- iv. We disagree that chemical sunscreens are so vital and so important for their own sake that people should not ask questions about their use. We suggest the Cancer Society in particular is compromised in their allegations about sunscreen comments, considering their conflict of interest over the funds they generate from their sale of endorsed sunscreen products.

Defending our Representation- 7

Representation 7

“What is UV light?”

The comments on our website in response to this ‘frequently asked question’ follow. (This was arbitrarily summarised by the Complainants.)

Sunlight is made up of several different types of light. Ultraviolet (UV) light makes up about 5% of sunlight. UV light from tanning lamps is not 'artificial', rather the device which emits them is 'artificial'. So the UV light in a sunbed replicates that from the sun, except that the rays are created in differing quantities and the environment can be controlled to reduce the risk of burning the skin. UVA rays have the least energy. If absorbed in excess, UVA can alter and damage the collagen & elastin of the dermis (skin). (This is why using good quality pre-tan lotions is so important- as vital nutrients and antioxidant ingredients help guard against the potential damage). UVB is a higher energy wave which is essential for the production of vitamin D. UVB stimulates melanin production (tanning) and thickens the surface skin, providing protection against sunburn. If absorbed in excess UVB can cause sunburn. UVC does not penetrate the ozone layer- this light will damage DNA & is often used as a sterilising light. UVC is not used in tanning equipment.

Why we defend this representation:

- a) Once again, by omission, the Complainants have intentionally neglected to show the balanced and educational nature of this Representation.
- b) We defend our comments that UV light in a sunbed replicates the light from the sun, and that the indoor tanning environment is controlled. The tanning lamps used in the sunbed equipment at Get Brown Tanning contain UVA and UVB emission in a 160watt sunlamp delivery system.³⁴ The UV-radiating environment is controlled by our trained operators via a standard exposure schedule for each client exposure. The exposure (or 'session') is set at a remote central timer by the operator; the client starts the session when ready by pressing a 'Start' button. The session finishes automatically when the exposure time has elapsed- and the client has an option to stop the session earlier if necessary. The explanation of how these controlled sessions break down can leave the reader in no doubt that UV tanning sessions here at Get Brown Tanning are just that: “controlled”. *(By comparison, potential UV exposure to the skin in the outdoor environment (i.e outdoors in the sunshine) varies every single time- depending on the covering of the skin, the time of day, the position of the sun in the sky, the exact location of the person, and environmental factors such as pollution and cloud cover.)*

- c) We defend our comments regarding melanin production (tanning) and sunburn protection. The Cancer Society itself agrees that more tan equals less sunburn. "People with naturally dark skin (Fitzpatrick skin types V & VI) have high melanin levels in the skin. Although they rarely or never burn and are better protected from skin cancer, they are at greater risk of vitamin D deficiency."⁷⁵
- d) We defend our discussion of the scientific nature or biological impact of ultraviolet light- it is not false or misleading. The comments in this section are factual. *(In fact it is anti-tanning groups' publication of statements such as 'any tan is a sign of skin damage' that wilfully mislead the public and misrepresent the complex issue. Is most of the global population, therefore, expected to consider themselves permanently 'skin damaged' due to their Fitzpatrick skin type determinations of 4, 5 or 6- making them effectively just 'more tanned' than the Caucasian population?)*

Addressing the Complainants' Response to Representation 7

7. What is UV light?

(The Complainants' Response to these Representations:)

The solarium industry arguments[sic] that tanning in sunbeds is a safer or more controlled way for people to obtain a tan are not valid. Exposure to UV radiation has been proven to be harmful and there is no such thing as a 'safe tan'. As stated earlier, sunbeds typically are UVA-rich and emit low levels of UVB (which is the UV spectrum which makes vitamin D). It is possible that many solariums emit UV radiation that is three times the strength of the midday summer sun, since this is the level of UV radiation allowed under the Australia/New Zealand standard on Solariums for Cosmetic Purposes.

Also a 2010 study by the National Institute of Water & Atmospheric Research (NIWA) looked at the radiation levels of sunbeds in New Zealand, measured by the World Health Organization's UV index. It found the average radiation levels emitted by sunbeds commonly used in New Zealand was similar to New Zealand's summer sunlight, which is high to extreme on the UV index. Moreover, in this study, the intensity of radiation at some wavelengths was several times higher than ever occurs in natural sunlight. According to NIWA researcher Dr Richard McKenzie by using sunbeds we expose ourselves to unknown risks[link].

Similarly, a study of 20 solariums in Australia concluded that Australians have access to sunbeds that have significantly higher UVB and UVA emissions than mid-latitude summer sunshine, "with implications for resultant adverse health effects.[link]"

According to the IARC Working Group the evidence does not support a protective effect of solarium use against damage to the skin from subsequent sun exposure.

We say (4):

- i. There's that word the Complainants like to use again: safe. Please refer back to our comments in 1b) to see why we believe they are irresponsible and themselves deliberately misleading to repeatedly use a word that is not used by Get Brown Tanning.

⁷⁵ Cancer Society NZ, Aug 2008. 'Position Statement: The Risks and Benefits of Sun Exposure in New Zealand.'

- ii. Please refer to our comments above in 7b) for a complete breakdown of an exposure session at Get Brown Tanning which confirms that indoor tanning here is indeed 'controlled'.
- iii. The Complainants are incorrect when they say "Exposure to UV radiation has been proven to be harmful..." Again, they fail to apply qualitative parameters to their assertions. Any and all exposure to UV radiation has not been 'proven to be harmful'- far from it- when it is universally known that 'exposure to UV radiation' creates vitamin D in the skin and organs. We agree with the statement when it is correctly presented: over-exposure to UV light may be harmful.
- iv. Please refer to our comments above in 4d) to see why we refute the often-touted but nonetheless nonsensical statement 'there is no such thing as a safe tan'. Please also refer to our comments above in i) about the Complainants ever-present use of the word 'safe'.
- v. Donald Smith at the NIRRI has provided us with the closest estimation of the UV mix in the sunbed equipment in use at Get Brown Tanning than any other currently available without testing the equipment itself.³⁴ Thanks to this analysis of traditional and new-era 160watt lamps, we can see that the synthesis of vitamin D possible during exposure to UV light at Get Brown Tanning is about twice as effective as the summer sun.
- vi. The Complainants refer to the allowable emission of sunbed equipment from the Standard AS/NZS 2635:2008. We say the inclusion of this irrelevant comment is yet another way to quote 'alarmist' information without quantification or context. "It is possible that many solariums may emit UV radiation that is three times the strength of the midday summer sun..." is a meaningless and unnecessary inclusion in their response. Whatever the emission strength of Get Brown Tanning's (or any of our fellow defendants') sunbed equipment, the only issue that should be of concern to the Complainants is the actual client exposure to the UV radiation. As previously explained, this is controlled according to a manufacturers' exposure schedule, and according to industry best practice guidelines for acquisition of a natural tan without risk of sunburn. The Complainants' comments are therefore irrelevant to the allegation made about Get Brown Tanning.
- vii. The NIWA study⁷⁶ quoted by the Complainants is irrelevant to this issue because the study did not review sunbed equipment that is "commonly used in New Zealand" sunbed salons. The study compared "production rates of vitamin D as a function of sun-burning radiation for two types of dermatological UV chambers..." The UV-emitting devices studied belonged to a dermatologist at Greenlane Clinical Centre and Rooms in

⁷⁶ McKenzie, Richard L et al. "Erythema versus vitamin D production from sunlight and solariums." National Institute of Water and Atmospheric Research (NIWA), UV Workshop 2010. <http://www.niwa.co.nz/our-services/online-services/uv-and-ozone/workshops/2010/papers/papersindex>

Auckland. We therefore do not accept the comparison to the UV-emitting devices in use at Get Brown Tanning. At the time and again now we have seriously questioned the integrity of all those involved with the UV workshop last year from where this information comes, that resulted in media attacks on the sunbed industry. The sunbed industry was not invited to participate in the workshop, despite being at the forefront of the administration of UV light. The statements subsequently issued about the effect of sunbeds by Dr. McKenzie and others were based on data that did not review typical sunbeds, but the public were not made aware of this crucial, confounding fact.

- viii. Comments from the Australian study quoted by the Complainants are irrelevant to this allegation in light of the fact that Get Brown Tanning has been accepted by Consumer NZ as operating a 100% compliant indoor tanning operation in their 'mystery shop' survey of 2010³. The 'access' that Australians have to unregulated or poorly managed solariums might be putting them at risk of 'adverse health effects' but this has no bearing on the compliant and highly controlled indoor tanning environment at Get Brown Tanning. These comments should not be considered when determining the merit of an allegation of breach of the Fair Trading Act by our business.
- ix. The Complainants' response indicates we have made claims of a "protective effect of solarium use against damage to the skin." Here at Get Brown Tanning we do not make claims about a reduction of skin damage (*any more than we claim using sunbeds is 'safe'*). Rather, we explain to people interested in the topic that as a result of our own, and our thousands of clients' experience, we believe acquiring a tan in a non-burning fashion prior to a sunny vacation will minimize or eliminate the likelihood- specifically- of holiday sunburn. The potential for over-exposure to UV light to cause skin-damaging sunburn and dehydration is not denied- in fact it is extensively discussed in terms of how to reduce or eliminate the possibility of this kind of skin damage.

Defending our Representation- 8

Representation 8

"Smart tanning"

The comments on our website which form part of a response to a 'frequently asked question' follow. Omissions by the Complainants appear in blue.

Most of us have probably never even questioned this – but here's the thing – UV light itself is invisible and has no heat. So why do we feel warm during a tanning session? It's all to do with the production of melanin pigment that's stimulated by exposure to UV light. Melanin turns our skin brown, but more importantly – because clever Mother Nature has a perfect plan – melanin is an excellent photoprotectant. This means that melanin absorbs UV radiation and transforms the energy into harmless amounts of heat. The

process is called Internal Conversion, and it's the reason why indoor tanning believers say that moderate tanning protects the skin.

Melanin is so efficient at protecting our skin- it dissipates 99.9% of the absorbed UV radiation as heat, so there's only less than 0.1% left to produce any potential skin damage. Most sunscreens (or *artificial melanin* as they are sometimes referred to) are not nearly as efficient at converting UV into heat, averaging less than 60% conversion.

With sunscreens, there is potential for much more DNA 'excited-state' activity, which in turn produces free radicals and ultimately skin damage. So if you **can** develop a tan indoors, doing so will provide a measure of natural protection to your skin.

Rather than spending too long in the sun covered in sunscreen, manage your outdoor UV exposure by covering up and seeking some shade once your naturally tanned skin has taken as much UV exposure as it can handle- before you feel the tell-tale, over-heated feeling that warns you your skin has had enough.

Why we defend this representation:

- a) Once again, by omission, the Complainants have intentionally neglected to show the balanced and educational nature of this Representation.
- b) The information here about free radical activity in the skin as a result of sunscreen use is factual⁷⁷, and as such we defend our publication of it.
- c) We are always sure to add the omitted word to these kinds of statements. Interested readers are always reminded that only those who can develop a tan (i.e skins type 2 and over) will benefit from the protective effect of a moderately acquired natural base tan.
- d) Research furnished by Donald Smith at NIRRI shows conclusively that facultative pigmentation (i.e a tan) provides 'a measure of natural protection to the skin'.⁷⁸
- e) Little research has been done examining the relationship between sunbed use and sunburn prevention. However one 2009 study reported that most of the 1242 respondents "indicated that they hardly or never had sunburns following indoor tanning."⁷⁹ At Get Brown Tanning, we know that 42% of clients seek out sunbed services in order to prevent sunburn.⁸

⁷⁷ Wikipedia. 'Sunscreen Controversy- Potential health risks of sunscreen.'

http://en.wikipedia.org/wiki/Sunscreen_controversy

⁷⁸ **Appendix F.** Smith, Donald L. 'NIRRI Online News: Memo to the New Zealand Commerce Commission in response to the complaint made by the Cancer Society and Consumer NZ on February 7 2011. We say (5).' Non-Ionizing Radiation Research Institute, Tuscon, AZ.

⁷⁹ Dissel, M et al, "Indoor tanning in North Rhine-Westphalia Germany: a self-reported survey," *Photodermatology Photoimmunology and Photomedicine* (2009 Apr); 25(2):94-100.

Addressing the Complainants' Response to Representation 8

8. Smart tanning

(The Complainants' Response to these Representations:)

According to the IARC Working Group the evidence does not support a protective effect of sunbed use against damage to the skin from subsequent sun exposure. It's estimated the protection from a sunbed tan is about the same as using as SPF2 or SPF 3 sunscreen. You need at least SPF15 to get the recommended level of protection.

We say (5):

- i. Please refer to our comments above in Representation 7, 4, ix) with regard to the term 'skin damage'.
- ii. We defend the protective effect of a moderately acquired natural tan via any means which extends the time a person may receive direct UV exposure before an erythema (sunburning) limit is reached. The Complainants agree that a sunbed-acquired base tan gives SPF2 or SPF3 protection. As shown by NIRRI research⁷⁸, given the actual protection afforded by peoples' ineffective use of chemical sunscreens, ironically the sunbed tan protection factor is much the same, in actuality, as the 'recommended' SPF15 chemical sunscreen.
- iii. One size does not fit all when it comes to UV exposure, and we again seriously question the motivations of the Complainants in their apparent disregard for this vital information. How can the Cancer Society make a blanket statement like: "You need at least SPF 15 to get... protection" while at the same time their own recently revised publication¹⁸ advises that some darker-skinned people may never need to wear sunscreen at all?

- Responses to Individual Allegations end here -

8. The material has been removed from our website and replaced with an explanatory note pending the Commerce Commission's final decision. We have also undertaken a review of the rest of the Information section in order to ensure our comments are rigorously supported and referenced wherever possible.

MISCELLANEOUS MATTERS

9. No, our company has not received complaints on these issues.

However, we do have one of our own. We have to ask why the Commerce Commission has allowed the Complainants to publish their complaint on their website? Surely this is prejudicial in the extreme and in itself a violation of the principles of the Fair Trading Act. We request the Complainants' be instructed to remove the publication, and we further request that in the event the complaint is not upheld the Complainants be instructed to issue public notification of this result.

10. Other information.

In the interests of Fair Trading, we'd like to remind the Commission that the representations made by Get Brown Tanning appear in an 'online' environment in which an interested reader can just as easily access a ton of publicly available information that talks about the 'downside' of using sunbeds.

Again we would like to thank the Commission for the opportunity to respond to these allegations by the Complainants, and look forward to hearing back from you when the next stage of the process is reached.

Yours faithfully,

Tiffany Brown
Managing Director
Get Brown Tanning