COMPLAINT NUMBER	16/199
COMPLAINANT	A. Chang
ADVERTISER	Grin Natural Products
ADVERTISEMENT	Grin Natural Products Website
DATE OF MEETING	23 August 2016
OUTCOME	Upheld in part/ Settled in part

SUMMARY

The website advertisement for Grin Natural Products (www.grinnatural.co.nz) includes a list of benefits of the products. Claims included "reduces tooth decay", and “helps reduce cavities and plaque build-up" The same claims were also included on the Grin Natural Products Facebook page where you could buy the products

The Complainant said that advertisement contained misleading claims in relation to the product being able to help prevent tooth decay, reducing plaque build-up and the effectiveness of using Manuka oil in their products.

The Complaints Board acknowledged the Advertiser’s efforts to amend its advertisement and agreed that some parts of the complaint were settled. However, the claims in relation to the Manuka oil remained and in the Board’s view, had not been adequately substantiated. Therefore the Complaints Board said the Manuka oil claims were in breach of the Therapeutic Products Advertising Code.

Accordingly, the Complaints Board ruled the complaint was upheld in part and settled in part.

[Advertisement to be removed]

Please note this headnote does not form part of the Decision.

COMPLAINTS BOARD DECISION

The Chair directed the Complaints Board to consider the advertisement with reference to Principles 2 and 3 and Part B1 Requirements 4 and 4(a) and 4(b) of the Therapeutic Products Advertising Code.

This required the Complaints Board to consider whether the advertisement was truthful, balanced and not misleading and if the claims were valid and able to be substantiated.

The Complaints Board was also required to consider whether the advertisements for therapeutic products were prepared with a high standard of social responsibility as consumers rely on them for their health and wellbeing.

The Complaints Board ruled the complaint was upheld in part and settled in part.

The Complaints Board noted the concerns of the Complainant that the advertisement contained misleading claims about Grin Natural toothpaste including:

Claim 1– Reduces the risk tooth decay
Claim 2 – Reduce plaque/ Combats plaque
Claim 3 – Manuka oil is useful in oral health

The Complaints Board considered the response from the Advertiser that confirmed changes had been made to the advertisement.

Claims 1 and 2

The Complaints Board confirmed Claim 1 in the original advertisement said that Grin toothpaste “Reduces the risk of tooth decay" and this had been removed.. It also noted that Claim 2 in the original advertisement stating “Reduce Plaque, Helps reduce cavities and plaque build-up" had also been removed from the website and the Facebook page. The Complaints Board agreed that the amended wording had addressed the issues raised in the complaint. Therefore, in light of the self-regulatory action taken by the Advertiser, the Complaints Board ruled the complaints for Claims 1 and 2 were settled.

Claim 3

The Complaints Board turned to claim 3 in the original advertisement which stated “Health benefits, Manuka oil, propolis and organic sea salt work together to help prevent tooth decay and to help keep the mouth healthy” and “…with studies showing the anti-septic properties of Manuka oil to be effective in helping with oral hygiene health”.

These claims had been changed to “Research indicates Manuka oil and propolis used in Grin toothpaste showed good potential to suppress growth of some common aerobic oral bacteria in vitro” and “infused Manuka oil extracts the incredible healing powers of Manuka have long been recognised by New Zealand Maori, who for centuries haven utilised this native shrub in treating a range of health conditions. More recently the world of science has caught up with studies showing the anti-septic properties of Manuka oil to be effective in helping with oral hygiene health.”

The Complaints Board acknowledged some of the wording in claim 3 had been updated. However, the statement that “…with studies showing the anti-septic properties of Manuka oil to be effective in helping with oral hygiene health” had not been adequately supported by the evidence provided to the Complaints Board.

The Advertiser had provided one study in relation to effectiveness of Manuka oil in oral health, however the Board noted this was an In vitro study and also took into account the Advertiser mentions "studies" but did provide any further evidence to support this statement.

As such, the Complaints Board said this part of the advertisement was likely to mislead and exploit the lack of knowledge of consumers.

Therefore, the Complaints Board found claim 3 in the advertisement did not observe a high standard of social responsibility to consumers and society and ruled the advertisement was in breach of Principles 2 and 3 and Part B1 Requirements 4, 4(a), 4(b) and 4(c) of the Therapeutic Products Advertising Code in part.

Accordingly, the Complaints Board ruled to Uphold this part of the complaint.

In summary claims 1 and 2 in the complaint were settled and claim 3 was upheld.

Finally, the Complaints Board noted that the Therapeutic Advertising Pre-Vetting Service (TAPS) was a user-pays service available to all advertisers making therapeutic claims to help minimise the risk of breaching the ASA Codes of Practice as well as other industry codes and relevant legislation. Information about TAPS is available at www.anza.co.nz. It 16/003 3 was recommended that therapeutic advertisements use the TAPS process to help with code compliance.

DESCRIPTION OF ADVERTISEMENT

The website advertisement for Grin Natural Products (www.grinnatural.co.nz) includes a list of benefits of the products, claims included "reduces tooth decay", and “helps reduce cavities and plaque build-up" The same claims were also included on the Grin Natural Products Facebook page where you could buy the products.

COMPLAINT FROM A. CHANG

I wish to complain about the claims of fluoride-free Grin Toothpaste; that it can be used to help prevent tooth decay, to combat plaque and that Manuka oil is useful in oral health. I have contacted the company to ask what evidence they have to back up their claims and they have not responded to my query.

I have then corresponded with the Sir John Walsh Research Institute at the Faculty of Dentistry at the University of Otago about whether it is possible for this toothpaste to live up to its claims.

I received a very thorough reply from respected oral health researcher Dr Jonathan Broadbent who discovered that a preliminary study related to Grin has been conducted by a Massey University food scientist that was in vitro, 'did not mimic the conditions in the mouth' and did not include human trials. Dr Broadbent advises that the gold standard for toothpaste (according to leading dental journals) is one containing 1,000 ppm of fluoride and that if a toothpaste does not reach this standard, any advertisements should warn consumers that reliance on the product carries a greater risk of dental caries than a toothpaste that does uphold the gold standard.

Accordingly, I submit that Grin is making several claims that it cannot back up; that it is effective in helping the balance of good and bad bacteria in the mouth that it helps reduce decay or helps reduce plaque.

I suggest there is no science relating to Grin's effect on bacteria in the mouth and that any reduction in decay or plaque would be as a result of the act of tooth brushing itself - which is better than not brushing at all - but that Grin toothpaste cannot claim to have any active ingredients with any effect on oral health.

Consumers are perfectly entitled to choose a fluoride-free toothpaste but they should not be misled by the claims of the product they choose, particularly when those claims may put their oral health at risk.

As well as its website, Grin uses extensive social media marketing with a Facebook page.

The claims can be found in both locations, as well as on marketing material that accompanies the product and its labelling.

THERAPEUTIC PRODUCTS IN ADVERTISING CODE

Principle 2 - Advertisements must be truthful, balanced and not misleading. Claims must be valid and have been substantiated.

Principle 3 - Advertisements must observe a high standard of social responsibility.

Part B1 Requirement 4 – Advertisements must not directly nor by implication, omission, ambiguity, exaggerated claim or comparison:

a) Mislead or deceive, or be likely to mislead or deceive;

b) Abuse trust, or exploit lack of knowledge; or

c) Exploit the superstitious or, without justifiable reason, play on fear or cause distress.

RESPONSE FROM ADVERTISER, GRIN NATURAL PRODUCTS

We write to acknowledge that we received the details of this complaint, and have reviewed our advertising material accordingly.

While we respectfully disagree with the complainant's wider views (evidence of our conclusions is included in this letter) we do understand their position, given their opposing view on the risks of fluoride.

With that said, we have agreed to make some amendments to the content featured on our website and other digital marketing channels, and have outlined these changes in this response.

1.0 Compliant on "Effective in helping the balance of good and bad bacteria in the mouth"

We draw this conclusion based on the scientific test which was conducted to investigate the antimicrobial effects of ingredients of toothpaste on growth of some human oral bacteria strains. The paper has been published at NZIFST conference July 2016. The summary of the report is as the following:

"Seven ingredients (peppermint, fennel, spearmint, menthol, Manuka tree oil, sea salt and propolis) used in the formulation of commercial household toothpaste were tested for their ability *in vitro* to inhibit against growth of eleven oral bacteria: *Streptococcus* (*S*.) *sanguinis, Rothia* (*R*.) *dentocariosa, Streptococcus (S.) salivarius, Streptococcus (S.) oralis*, *Staphylococcus (Staph.) epidermidis, Actinomyces (A.) odontolyticus, Fusobacterium (F.) nucleatum, Porphyromonas (P.) gingivalis, Prevotella (Pre.) buccae and Prevotella (Pre.) oralis. The microtiter plate reader method was used for the aerobic bacteria (S. mutans*, *S. sanguinis, R. dentocariosa, S. salivarius, S. oralis and Staph. epidermidis) and, the disc diffusion method was conducted for the anaerobic microorganisms (A. odontolyticus, F. nucleatum, P. gingivalis, Pre. buccae and Pre. oralis)."*

"Fennel and Manuka tree oil showed the strongest antibacterial effect, which suppressed the growth of all the six aerobic bacteria during incubation for 48 hours. No effect on the growth of *Staph. Epidermidis* was observed, but the compound suppressed the growth of *S. mutans, R. dentocariosa, S. salivarius and S. oralis* for 48 hours. When mixed with peppermint or menthol, only *Staph. epidermidis* showed growth in 48 hours during incubation, while no growth was observed with the other bacteria. Propolis demonstrated strong ability to suppress

growth of *S. mutans, R. dentocariosa, S. salivarius and S. oralis,* while the effect only lasted for less than 20 hours on the growth of *S. sanguinis* and *S. epidermidis.* Sea salt showed the weakest effect, which only suppressed the growth of *S. salivarius* within 48 hours, while no effects were observed on the other aerobic oral bacteria studied. None of the ingredients used in this study showed ability to suppress growth of the anaerobic bacteria strains tested. Grin™ toothpaste was also tested against growth of six oral aerobic bacteria. In conclusion, individual ingredients and grin™ toothpaste used in this study showed good potential to suppress growth of tested aerobic oral bacteria during incubation at 37° for 48 hours."
The claim also relies on a number of studies that investigating the antibacterial effect of propolis on oral bacteria in vitro and in vivo. i.e. Antibacterial effect of propolis and honey on oral bacteria (Steinberg D1, Kaine G, Gedalia I) which is published on NCBI.

Abstract

PURPOSE:
To investigate the antibacterial properties of propolis and honey against oral bacteria in vitro and in vivo.

MATERIALS AND METHODS:

In vitro study: The antibacterial effects of propolis and honey on oral streptococci were determined using the broth method. Clinical study: The short-term antibacterial effect of propolis solution and honey on salivary total bacteria and Streptococcus mutans was tested in 10 volunteers.

RESULTS:

Propolis demonstrated an antibacterial effect both in vitro on isolated oral streptococci and in the clinical study on salivary bacterial counts. Honey induced bacteria growth at low concentrations, while at high concentrations honey had an inhibitory effect on bacterial growth in vitro. Salivary counts of total bacteria and Streptococcus mutans were lower for 1 hour after application of honey. The antibacterial effect of the honey tested may be attributed to its osmolality effect.

Based on what information above, we agree to amend our statement as the following:

Healthy Gums

Our formula contains organic sea salt – a natural antiseptic that helps keep the gum healthy. Manuka oil and propolis also lend their antiseptic properties to help keep gums healthy.

Helps remove stain

We have included organic sea salt and natural xylitol, which helps to prevent stain build-up with regular brushing

Healthy Teeths

In Vitro Research indicates Grin™ natural (cool mint) toothpaste has the ability to inhibit the growth of S. mutans, an aerobic bacterium which may potentially result in tooth decay.

Leave out the nasties

Grin Toothpaste contains NO sodium lauryl sulfate, NO preservatives, NO artificial colours, NO artificial flavours, NO fragrance and NO harsh abrasives.

Antispetic

Research indicates Manuka oil and propolis used in Grin toothpaste showed good potential to suppress growth of some common aerobic oral bacteria in vitro.

Freshens breath

Our active ingredients provide an effective clean, while natural spearmint, peppermint and fennel extracts leave your mouth with the minty freshness you expect after a good brush.

2.0 Compliant on "Helps reduce decay"

The conclusion is based on the scientific test conducted to investigate the antimicrobial effects of ingredients of toothpaste on growth of some human oral bacteria strains. The paper has been published at NZIFST conference July 2016. The relevant information is:

"Most oral health problems are related to oral bacteria (Human Diseases and Conditions, n.d.). There is a large and diverse number of bacteria in the mouth, comprising of normal flora and pathogens (Anthony, 2008), of which S. mutans and P. gingivalis are of significant importance. S. mutans is associated with human tooth decay (Takei et al., 1992). The cocci metabolises sucrose, glucose, fructose and lactose to lactic acid (Loesche, 1996), which can acidify the mouth leading to the dissolution of mineralized tooth enamel. S. mutans metabolises sucrose to produce a sticky dextran-based polysaccharide which enables S. mutans to adhere and accumulate on the tooth surface, resulting in decay in the underlying surface (Loesche, 1996). The bacterium is capable of fermenting other carbohydrates to lactic acid which may lead to tooth decay (Kiser, 2011)."

Specifically, the Grin™ commercial toothpaste was tested for its ability to inhibit the growth of S. mutans, S. sanguinis, R. dentocariosa, S. salivarius, S. oralis and Staph. epidermidis. The

toothpaste product was diluted 60, 120 and 600 times in BHI broth. The suspension was mixed and appropriate quantities were loaded into each well as previously described. The three toothpaste solutions were used to examine their effects on the growth of S. mutans, S. sanguinis, R. dentocariosa, S. salivarius, S. oralis and Staph. epidermidis using the microtitre plate method.

“Results show that S. mutans, S. sanguinis, R. dentocariosa, S. salivarius, S. oralis were not able to grow within 48 hours during incubation at 37 °C in toothpaste diluted 60 times. Slight growth of Staph. epidermidis was observed in the sample diluted 120. Results show that toothpaste solution diluted 120 times inhibited the growth of S. mutans, S. sanguinis, R. dentocariosa, S. salivarius, S. oralis during incubation at 37°/48 hours. When dilutions were increased to 600 times, steep growth of S. sanguinis, R. dentocariosa, S. salivarius and S. oralis, were observed within 10 hours.” Based on the results we could conclude that t growth of S. mutans was inhibited for the entire incubation period.

Given that Streptococcus mutans is facultatively anaerobic, gram-positive coccus commonly found in the human oral cavity and is a significant contributor to tooth decay, **we have reviewed the claim and have also amend our statement to:**

In Vitro Research indicates Grin™ natural (cool mint) toothpaste has the ability to inhibit the growth of *S. mutans*, an aerobic bacterium which may potentially result in tooth decay.

3.0 Compliant on “Helps reduce plaque”

We have made some amendments to the material featured on our website and listed on the complaint in recognition of the beliefs they hold.

Healthy Gums

Our formula contains organic sea salt – a natural antiseptic that helps keep the gum healthy. Manuka oil and propolis also lend their antiseptic properties to help keep gums healthy.

Helps remove stain

We have included organic sea salt and natural xylitol, which helps to prevent stain build-up with regular brushing

Healthy Teeths

In Vitro Research indicates Grin™ natural (cool mint) toothpaste has the ability to inhibit the growth of S. mutans, an aerobic bacterium which may potentially result in tooth decay.

Leave out the nasties

Grin Toothpaste contains NO sodium lauryl sulfate, NO preservatives, NO artificial colours, NO artificial flavours, NO fragrance and NO harsh abrasives.

Antispetic

Research indicates Manuka oil and propolis used in Grin toothpaste showed good potential to suppress growth of some common aerobic oral bacteria in vitro.

Freshens breath

Our active ingredients provide an effective clean, while natural spearmint, peppermint and fennel extracts leave your mouth with the minty freshness you expect after a good brush.

Grin Cool Mint 100% Natural Toothpaste

Share

Share | Save

Grin Cool Mint 100% Natural Toothpaste

Sold by Grin Natural Products

$7.99

Check Out on Website

This will take you to www.grinnatural.co.nz

Health Benefits:

- Manuka oil, Propolis and Organic sea salt work together to help prevent tooth decay and to help the mouth healthy.

- Helps reduce cavities and plaque build-up.

- Beneficial in maintaining general oral health and hygiene.

- Leaves teeth fresh and squeaky clean

Directions for use:

For best results, brush at least twice a day after meals.

Warning: Propolis may cause severe allergic reactions. If irritation or swelling of the mouth or throat occurs, discontinue use and consult a healthcare practitioner.

grin Home Products Why Grin Stockists Contact us 0

Why Grin

At Grin we're all about what we leave in, what we leave out, and how we leave your teeth. Our formulation is 100% natural and helps to keep the mouth healthy - because toothpaste needs to get the job done.

Ingredient	What is it?	Health Benefit
Propolis	Often referred to as "bee glue", propolis is resinous mixture that honey bees collect from tree buds, sap flows, or other botanical sources.	Propolis offers antiseptic properties to help keep the mouth healthy.
Manuka Oil	Extracted from the leaves and small branches of the Manuka tree (Leptospermum scoparium), which is native to New Zealand.	Studies suggest that the anti-septic activity of Manuka Oil may help in the management of good oral health.
Organic Sea Salt	When salt is certified organic the certification refers to the process of collection of sea salt.	Regular rinsing and gargling with tepid sea salt water helps to manage oral hygiene and to soothe an irritated mouth.
Fennel	A flowering plant species in the carrot family. Fennel is a hardy, perennial herb with yellow flowers and feathery leaves.	Fennel has been in use in culinary applications and as a mouth freshener since ancient times.

Menthol	A organic compound made synthetically, or obtained from corn mint, peppermint or other mint oils.	Used to help with soothing an irritated mouth or throat.
Spearmint	A herbaceous perennial plant with a square-shaped stem, broad leaves, and white/pink flowers.	Helps keep your mouth and throat cleaned and effective dental and gum health.

Our commitment

Our commitment you is also defined by the ingredients we avoid.

- **Sodium Lauryl Sulfate**

We do not use SLS (short for Sodium Lauryl Sulfate), which is a common component of ordinary toothpastes. This chemical compound does not actually clean teeth—its sole purpose is to produce foam, which only gives the impression of cleaning. In some people, it can cause skin irritation.

- **Fluoride**

We do not add fluoride, although it is used in many commercial toothpastes.

- **Artificial Colours**

Because we do not add artificial colours, the appearance of our products may vary from batch to batch.

- **Artificial Flavours or Fragrances**

We do not use any synthetic flavours or fragrances—we prefer a fresh, natural taste and are sure you will, too!

- **Artificial Preservatives (EDTA, Formaldehyde, Parabens, Etc.)**

Natural preservatives work as well, if not better, than artificial alternatives.

- **Animal Ingredients**

Our support of non-animal-testing models also includes the belief that we don't need to use animal ingredients to create effective products. For example, glycerin used in toothpastes and soaps is often made from animal ingredients, but ours is vegetable-based.

- **Saccharin Or Other Artificial Sweeteners**

Many conventional toothpastes contain artificial sweeteners. In Grin Natural toothpaste, we rely on the natural sweetness of xylitol, spearmint and fennel.

References

CDC, (2012) Prevalence and Severity of Dental Flourosis in the United States, 1999-2004. U.S. Department of Health and Human Services.

We have also attached the relevant sessions of Grin's research paper for your reference.

We hope this is satisfactory to the Complaints Board. Please let us know if you require any further information or evidence.

Reference:

Anthony, H. R. (2008). *Molecular Oral Microbiology*. USA: Caister Academic Press.

Steinburg D1, Kaine G, Gedalia I.(1996), Antibacterial effect of propolis and honey on oral bacteria, **National Center for Biotechnology Information (NCBI)**

Takei, T., Ogawa, T., Alaluusua, S., Fujiwara, T., Morisaki, I., Ooshima, T.Hamada, S. (1992). Latex agglutination-test for detection of mutans streptococci in relation to dental-caries in children. *Archives of Oral Biology, 37*(2), 99-104. doi:10.1016/0003-9969(92)90004r

Loesche, W. J. (1996). Chapter 99: Microbiology of Dental Decay and Periodontal Disease. In S. e. a. Baron (Ed.), *Baron's Medical Microbiology* (4th ed.). Galverston, Texas: University of Texas Medical Branch.