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WEIGHT LOSS AID

Technical Presentation for Practitioners

Curb[®] by Therapeutic Kitchen

Introduction

Therapeutic Kitchen is a Nutritional Therapy practice specialising in weight management and supporting clients with the underlying issues that can cause weight loss resistance. We offer a range of nutritionally led 1:2:1 and group programmes and a range of epigenetic and functional tests to identify and address underlying factors to help our clients reach their health goals.

We recognise that many people can benefit from additional support for weight loss through supplementation due to having a higher genetic predisposition to eat and snack more, ie. they need more support to 'Curb' their eating habits.

We have found the biggest challenge for many is appetite control and making changes in eating behaviour.

It was a chance conversation with a good family friend, Dr Trevor Jarman in 2020, when we introduced him to our business, and discussed the challenges of changing eating behaviours that many of our clients face.

Trevor is a retired biochemist, and co-founder of Natures Remedies Ltd. His company had researched, developed and successfully commercialised products containing a well-researched and clinically proven herbal weight loss formulation called 'YGD' in both the UK and USA for over twenty years.

YGD

The YGD formulation contains plant extracts of Yerba Maté, Guarana and Damiana. The formulation is backed by extensive research showing how it helps users to eat and snack less; with evidence that it modulates the levels of key hormones involved in appetite and satiety and slows intestinal transit, reducing food consumption.

After many discussions, we felt that this was a natural fit and we formed a collaboration to bring back the YGD formulation to the market as a weight loss aid under the brand name 'Curb' by Therapeutic Kitchen. We have enhanced the original YGD formulation by adding Vitamins B3 and B6 to Curb to ensure efficient energy metabolism to help with support energy and motivation which are key in weight loss.

What were the origins of 'YGD'?

The inventor of the YGD formulation was the late Dr Lasse Hessel, a Danish medic. For a period he lived in the USA and was famed for his work with the New York Times as their medical correspondent.

Dr Lasse Hessel also had a major interest in the benefits of fibre in the diet and in weight loss. Whilst in the USA he worked with researchers at Cornel University on a range of plants with potential in effective weight loss.

One his return to Denmark this allowed him to focus on the YGD formulation and engaged two Danish doctors to test it in placebocontrolled trials. The trials demonstrated statistically significant weight loss and also that YGD slowed the rate at which the stomach emptied.

On the strength of these results Dr Hessel filed patents on the YGD formulation.

Dr Jarman met Dr Hessel when they worked for a drug discovery company involved in developing drugs for weight loss. The company was not interested in a 'herbal' product and so Drs Jarman and Hessel formed Natures Remedies Ltd to commercialise a YGD containing product.

Introduction

As Health Practitioners, we have found more and more of our clients have underlying weight issues that can cause health concerns that reduce their quality of life. When we tackle weight management, there are many parts of the jigsaw puzzle that need to be considered properly in order for our clients to achieve their optimum weight. As we can see, eating control is a highly complex function in the body.

Weight management challenges

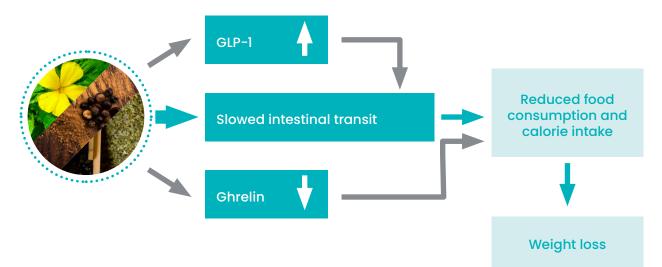
- Lifestyle
- Genetic predisposition
- Food preferences
- Drinks & alcohol
- Portion control
- Confusing information overload
- Rapid yet Yo-Yo diets
- Denial
- Lack of medication and effective aids



What are the mechanisms of Curb[®] in supporting weight loss?

The Major Effects of Curb°

Andersen and Fogh, (2001), Harold et al. (2013)



"It is concluded that Curb is capable of reducing energy and macronutrient intake by decreasing acylated ghrelin concentrations and increasing GLP-1 concentrations in overweight and obese women." Calestino, M. M. et al, 2017

Appetite control is fundamental to weight loss and weight management and that is exactly what Curb does.

Previous papers have shown that the administration of YGD slowed intestinal transit, reduced food consumption, as well as the calorie amount consumed and resulted in weight loss in overweight subjects. Andersen & Fogh, 2001; Harrold et al., 2013.

In a further clinical study, it was confirmed that YGD supplementation reduced energy and macronutrient intake at lunch. There was a significant increase in GLP-1 concentrations after breakfast followed by a significant decrease in acylated ghrelin levels after lunch indicating that the decreased food intake resulted from changes in gastrointestinal hormone levels caused by YGD. Calestino, M. M. et al, 2017

What is the synergistic impact of Curb's three main ingredients?

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Synergistic impact of complex mixtures



Satiety Thermogenesis (GLP-1) Anti inflammatory Vasodilator Cardioprotective CNS stimulant Antimutagenic Thermogenic Antioxidant Weight loss

Anti anxiety Antioxidant Anti inflammatory GLP-1 receptor agonists Inhibiting DPP-IV

CNS stimulant Antioxidant Anti inflammatory Immunomodulatory Thermogenic Reducing appetite Yerba-Maté llex paragua riensis



Damiana Turnera diffusa



Guarana Paullinia Cupana



What does the extensive clinical research show about the Curb[®] YGD formulation?

YGD Formulation

Extensive clinical research into effects and mechanisms over 25 years show:

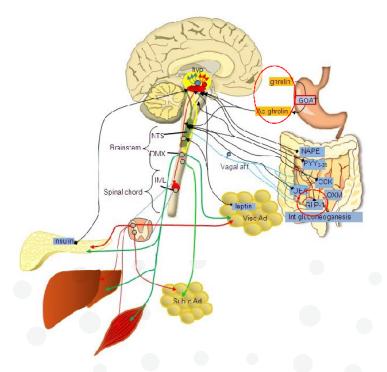
- Effective weight loss at healthy rate (ca 1.6 3kg/4 weeks)
- Reduced rate of stomach emptying
- Lower energy intake at a meal (17%)
- Healthier food choices
- Less snacking
- Increase in satiety hormone GLP-1 and decrease in hunger hormone Ghrelin
- Overall improved appetite control

Prior products include Zotrim in UK and Zantrex-3 in USA Harrold, J. A. et al, 2013. Celestino, M. M. et al, 2017.

Eating control the highly complex function

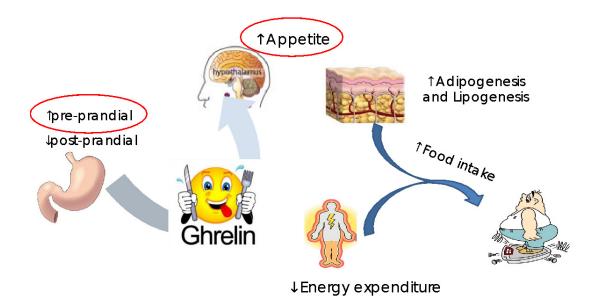
Appetite and satiety functions are very complex regulatory processes that involve peripheral gastrointestinal mechanisms and integrative central nervous system functions predominantly located in the hypothalamus area of the brain.

From: Serge Luquet and Christophe Magnan. Frontiers in Bioscience S1, 448-465, 2009



Peptide hormones produced from the gastrointestinal tract in response to nutritional intake, such as ghrelin and glucagonlike peptide-1 (GLP-1), are considered to be major regulators of appetite. These hormones act in the hypothalamus, which then communicates with higher brain centres using neuropeptide Y/ Agouti-related peptide (NPY/ AgRP) or pro-opiomelanocortin.

Ghrelin - the hunger signaling hormone



Tschop et al. (2000). Na ka zato et al. (2001), Calla han et al. (2004), Asa ka wa et al. (2005)

Ghrelin is the first known peripheral hormone to display orexigenic (i.e. stimulating appetite) effects through its action on the hypothalamic appetite-regulating pathways (Nakazato et al., 2001).

The preprandial increase of ghrelin levels was found to initiate meal consumption voluntarily (Cummings et al., 2004), while the postprandial ghrelin suppression is proportional to the ingested calorie load (Callahan et al., 2004).

Two isoforms of ghrelin are identified, the active (acylated) and inactive (deacylated). Acylated ghrelin is recognized as the preferred measure as it relates more clearly to functionality.

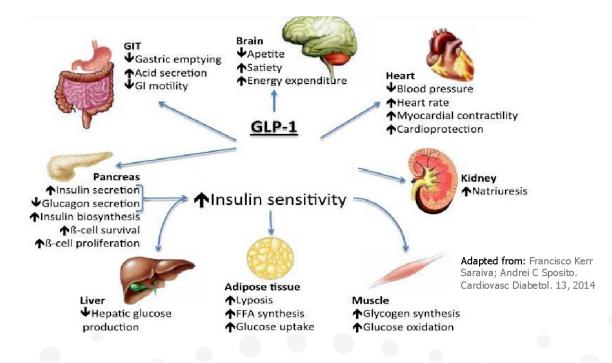
Acylated ghrelin induces body weight gain and adiposity by promoting food intake and decreasing energy expenditure (Asakawa et al., 2005; Tschop et al., 2000).

Higher plasma ghrelin levels have been shown in many disorders of metabolism and weight, reinforcing the importance of ghrelin in the regulation of metabolic homeostasis (Costantino, 2012).

GLP-1 - the satiety hormone

In contrast to ghrelin, GLP-1 is released into the circulation after a meal and is reduced during periods of fasting. GLP-1 is secreted from the distal small and large intestine and therefore is released into the circulation following consumption of food.

On the other hand, the GLP-1 is an anorexigenic (i.e. appetite suppressing) peptide produced by intestinal epithelial cells in response to food intake. The secretion of this hormone stimulates glucose-dependent insulin release, thus reducing blood glucose and inhibiting the secretion of glucagon, reducing endogenous glucose production, delaying gastric emptying and increasing satiety.



New diabetic "wonder drug" versus Curb[®]

There are a lack of drugs for obesity and safe pharmaceutical interventions have proved very difficult to develop. Curb works on the same mechanisms as some of the prescription diabetic drugs but without the side effects and contraindications.

Using synergistic plant extracts with multifactorial effects strengthens the rationale for Curb as a product with no side effects, especially as the ingredients are all traditionally used plants with a long history of everyday use.

Semaglutide Appetite drug: could mark 'new era' in tackling obesity

www.bbc.co.uk/news/ health-56011979

- A drug that suppresses appetite by hijacking the body's appetite levels and mimicking the satiety hormone GLPI
- Weekly injection
- Considerable side effects
- Only available via obesity consultants.

Whilst Curb ...

- Increases same satiety hormone GLP1
- Also acts by reducing hunger hormone ghrelin
- Will be much more widely available
- Natural product
- No side effects
- Can be used long term

The genetic link: what is the link between weight loss and your genes?

Our genes shape every aspect of our physiology, including our weight. It's estimated the heritability of weight issues are at anywhere between 40-70%. But it's important to remember our DNA is not our destiny and a genetic test will show our predisposition to certain conditions or tendencies. In other words, they act like a loaded gun but the trigger is our diet, lifestyle and environment.

As practitioners who work with genetics, we understand that variations on our genes can increase the risk of childhood obesity, overeating, snacking and greater long term weight gain and specific health conditions. The most important thing to understand is that diet, environment and lifestyle can set things in motion. That's because chronic conditions, including overweight and obesity, are multifactorial as discussed at the beginning of this information sheet.

A person may be genetically predisposed to gain weight but what they eat, how much they exercise, and how carefully they pay attention to other missing links can help mitigate their genes' natural inclination. Curb is a complementary product for professionals using genetic testing to support clients with weight loss. However, even for those clients who haven't done a test but know they have a tendency towards snacking and eating too much, Curb is a perfect solution to improve their eating habits.

Curb has a proven action of reducing the hormones that increase your appetite and increasing your satiety hormones, even if you technically have the genes to predispose you to weight gain and overeating.

The table below shows a summary of how Curb can support those clients who have a genetic predisposition to weigh, snack and eat more.

How Curb[®] can counteract Weight Related Gene Variations:

Gene Variant Effect	Proven YGD Action (Curb°)
Increase levels of hunger hormone, Ghrelin (e.g. FTO, CLOCK) level	Lowers Ghrelin levels
Lower satiety (eg. FTO)	Increases satiety via increased GLP-1 hormone
Increased snacking tendency (eg.MC4R)	Decreases snacking
High fat preference/high fat intake (eg.MC4R, APOA2)	Lowers energy intake and changes food preferences
Struggle to burn fat on exercise (e.g. ADRB2)	Yerba Mate increases fat burn on exercise
Overweight	Proven Weight Loss

Further information:

If you have any questions regarding Curb or would like any further information, please get in touch: <u>hello@therapeutickitchen.co.uk</u>

Affiliate Programme:

We have a great affiliate programme for Nutritional Therapists, Personal Trainers, and Weight Loss specialists and other Health Professionals. Please complete the <u>online contact form</u> and we will send you details on how you can become an affiliate.

https://therapeutickitchen.co.uk/curb-weight-loss/affiliates

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