Trans Fatty Acids are part of the hidden costs of modern "ready to go" diets, says naturopath Narelle Stegehuis.

ndustrial civilisation first invented the machine and then took it as its life model. In the name of productivity, our health, environment and our land-scape is threatened.

We are enslaved by speed and have succumbed to the fast life, which disrupts our habits, pervades the privacy of our home and forces us to eat fast foods.

Discretionary time has shrunk, so there's less time to be active and less time to spend sourcing and preparing fresh food.

Along with this trend is the emergence of "ready to go" meals lining our superrarket shelves. With continuing drough hreatening our food chain, it is becoming increasingly difficult to purchase reasonably priced vegetables and produce. Often consumers are forced to purchase poor grade, highly manufactured products due to financial constraints. However, finding a bit of wiggle-room in the household budget to challenge the industrial diet certainly proves beneficial to health.

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A hundred years ago, people ate around 100 different species of food. Now our diet is made up of at most 10 or 12 species. Recent concerns over food safety, including the spread of mad cow and foot-and-mouth disease, and public revulsion against genetically modified food has also helped to raise public awareness.

Other environmental issues such as the possibility to run or walk safely after dark are also posing challenges for some women. Do we live in an "obesogenic" environment - a world where it's hard to move, but easy to eat? Have we become complacent - have programs like 'The Worlds Biggest Loser' moved the goalposts? Rather than us thinking 10kg is overweight, we now think overweight means 30kg. Finding yourself 5kgs overweight is when the alarm bells used to go off, so what's changed?

Our environment has changed - the supermarket is a minefield, constructed to lead us into temptation, full of highly processed foods engineered by food tech-

nologists to deliver maximum profits and often negligible nutritional values. There is way too much food available, with too many companies fighting for a share of a market that already provides twice what anyone needs. The fact that fruit and vegetables generate typically lower profits may be part of the problem.

The default environment for food is cheap junk food in large amounts - what we need is to make healthy food the norm with junk food the outsider. The strength is to educate the population to see how their environment influences the food choices they make. The food industry certainly contributes, but it is hard to know whether the industry is responding to demand from consumers, or is respanning food preferences.

or is reshaping food preferences.

Improving the quality of junk food is not the solution - vitamin enriched or not, soft drinks are still soft drinks. Trans fat free snack foods are still rapidly absorbable carbohydrates.

With trans fat (TFAs) becoming such a main steam component of our food chain, (margarines, biscuits, fried foods and processed foods) the prevalence of medical conditions such as diabetes, obesity, heart disease, and cancer is increasing. Over the long term, they interfere with your body's ability to ingest and utilise the good fats and promote fatty body tissue to synthesise small amounts of testosterone and related hormones. These play roles in fuelling hormonal imbalances such as Polycystic Ovarian Disorder, fibroids, endometriosis, PMT, menopausal symptoms and low libido.

The Australian government is encouraging the manufacturers of products to clearly list TFAs on labels. The Australian Medical Association is calling for a ban on TFAs, in line with that enforced in Denmark. Here, foods containing more than two per cent are outlawed. Unfortunately, current Australian legislation states that trans fat need only be listed when a product is marketed as low in cholesterol or saturated fat. What many people don't realise is that trans fats are almost as bad for you as smoking.

SO HOW IS THE HARM DONE?

Picture it like this. The TFAs stop the essential fatty acids (derived from fish and good nuts - important for balancing sex hormones) from getting into the cell wall. So they have to find somewhere else to go. Over time, more and more TFAs block more cells - so new fat cells have to be built to keep them in - so you get fatter.

Trans Fats Affect Insulin, and Growth Hormone

Trans Fatty Acids impede the potential of insulin to bind with the cell, causing it to stay circulating in the blood. Now there is an excess of insulin in the bloodstream. Result? Ravenous hunger, low energy and light-headedness, mood swings and teariness. You then have to eat, and you have to eat carbs to satisfy the hunger. The long-term effect is lots of carbs, lots of overeating, and a total

inability to generate growth hormone (which is only released in the absence of insulin). Without growth hormone, less muscle is created, so there is less of an opportunity to burn the fat!

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Your Metabolism Slows

Oils derived from soybeans, for instance, slow down your thyroid, which lowers your energy levels, makes you feel less like exercising, and generally makes you fatter!

Hormonal imbalance

Along with making us gain weight. TFAs can also interfere with the production of prostaglandins which may increase the severity and incidence of PMS, painful periods and endometriosis.

Weight gain and abdominal obesity are strongly associated with insulin resistance. Evidence suggests that hyperinsulinemia (excess insulin) increases ovarian androgen production

and decreases serum SHBG (sex hormone-binding globulin that binds to sex hormones, specifically testosterone and estradiol). Increased androgen production and reduced binding of androgens to SHBG contribute to hyperandrogenism, resulting in a lack of ovulation and increased facial hair - imbalances found in women diagnosed with PCOS.

Your mood changes:

In a recent study at the University of Guelph, Dr Bruce Holub has demonstrated that the huge increase in TFAs in our diets over the last 20 years has been the main factor in the rise in the new generation of Attention Deficit Disorder (ADD) and Attention Deficit Hyperactive Disorder (ADHD) in children and could even contribute to mood changes in adults such as anxiety, depression, aggression and poor concentration. His research has shown that TFA interferes with the absorption of Omega 3 fatty acids which are physiologically important for brain function. Embracing healthy food changes not only improves health, but deals with the problems of the environment and world hunger without renouncing the right to pleasure

