

ORTHOREXIA? HORMESIS? VEGAN ACTIVISM?

Orthorexia? What Is It?

Although not formally recognized in the Diagnostic and Statistical Manual, awareness about orthorexia is on the rise. The term ‘orthorexia’ was coined in 1998 and means an obsession with proper or ‘healthful’ eating. Although being aware of and concerned with the nutritional quality of the food you eat isn’t a problem in and of itself, people with orthorexia become so fixated on so-called ‘healthy eating’ that they actually damage their own well-being.

Without formal diagnostic criteria, it’s difficult to get an estimate on precisely how many people have orthorexia, and whether it’s a stand-alone eating disorder, a type of existing eating disorders like anorexia, or a form of obsessive-compulsive disorder. Studies have shown that many individuals with orthorexia also have obsessive-compulsive disorder.

WARNING SIGNS AND SYMPTOMS OF ORTHOREXIA

- Compulsive checking of ingredient lists and nutritional labels
- An increase in concern about the health of ingredients
- Cutting out an increasing number of food groups (all sugar, all carbs, all dairy, all meat, all animal products)
- An inability to eat anything but a narrow group of foods that are deemed ‘healthy’ or ‘pure’
- Unusual interest in what others are eating
- Spending hours per day thinking about what food might be served at upcoming events
- Showing high levels of distress when ‘safe’ or ‘healthy’ foods aren’t available
- Obsessive following of food and ‘healthy lifestyle’ blogs on social media.
- Body image concerns may or may not be present

THE ABOVE TEXT IS PROVIDED BY THE “NATIONAL EATING DISORDERS ASSOCIATION” www.nationaleatingdisorders.org.

OF COURSE. ALWAYS BE AWARE OF INSTITUTIONAL BIAS.

We consider our mental health to be excellent, yet would agree with many of these “signs and symptoms”. How about you?

HORMESIS: A TINY BIT OF POISON

“What doesn’t kill you makes you stronger” is a phrase that contains more than a grain of truth. It describes the theory of hormesis – the process whereby organisms exposed to low levels of stress toxins become more resistant to tougher challenges.

The theory of hormesis has been around for decades, but has long been met with scepticism or downright suspicion. In recent years, however, biologists have pieced together a clear molecular explanation of how it works, and hormesis has finally been accepted as a fundamental principle of biology and biomedicine.

As an example, exposing mice to small doses of gamma ray radiation shortly before irradiating them with very high levels of gamma rays actually decreases the likelihood of cancer. A similar effect occurs when giving dioxin to rats.

The biochemical mechanisms by which hormesis works are not well understood. It is thought that a low dose of a toxin can trigger certain repair mechanisms in the body, and these mechanisms, having been initiated, are efficient enough that they not only neutralise the toxin’s effect, but can repair other defects not caused by the toxin.

One of the areas where the concept of hormesis has been explored extensively is ageing. It is thought that exposing cells to mild stress could result in the adaptive or hermetic response that has anti-ageing effects. Some mild stresses that might work for this include heat shock, irradiation, pro-oxidants, hypergravity, food restriction, and even exercise.

This is a fascinating concept, which highlights the problem inherent with so much of our medical interventions, whether natural or conventional. The stereotypical thought pattern that “if a little is good, more must be better,” usually turns out to be the precise converse of the truth.

Many have already been harmed by excessive exposure to toxins and forms of radiation that have been previously deemed “safe.” Think of:

- Smoking
- Vaccinations
- Water fluoridation
- Mercury amalgams
- Mobile phone radiation

Your body is a finely tuned instrument, and even seemingly insignificant changes can sometimes create major repercussions, for better or worse.

Like a spider’s web, if you pluck one strand, the entire web vibrates. Pluck too hard and it breaks the strand, collapsing the intricate design of the whole.

Hormesis – from the ancient Greek word hormaeim, meaning “to set in motion, impel, urge on” – is the term for favourable biological responses resulting from low exposures to toxins and other stressors. A toxin showing hormesis thus has the opposite effect in small doses than in large doses.

Homeopathy could be considered as an example here, where even a highly toxic (natural) substance can be used to produce dramatic healing responses in the body because it is reduced to such a degree that only the energetic essence of it remains; there’s enough to impel a healing change, but not nearly enough to tip the scales too far to cause damage.

Hormesis, then, is a biological phenomenon in which an otherwise adverse or detrimental influence is beneficial when applied at low levels – just enough to set something in motion.

The concept of biological hormesis is as important as that of homeostasis for the survival of an organism. Your body’s ability to resist and adapt appropriately to both internal and external stresses is essential for good health, and the hallmark of ageing is your body’s inability to withstand stress, and consequent body degradation.

The hormetic phenomenon in aging is characterised as beneficial responses to stress through physiological adaptations, as exemplified in lifespan extension by calorie restriction or exercise. Your body’s ability to adapt is thus developed during the resistance period.

This notion corresponds to the “survival of the fittest” view, where survival is dependant on metabolic and defensive adaptation to harmful stress.

The beneficial effects of hormesis can easily be observed with physical exercise. Proper exercise can improve your body function, boost metabolism, increase immune function, deter a wide variety of diseases, extend the average lifespan, and create resistance to oxidative stress. Too much exhaustive exercise, however, can be as harmful as too little or no exercise.

The stress theory of ageing is concerned only with adverse, lethal aspects of stress, far beyond the optimal level of stimulation. Excessive secretion of stress hormones such as ACTH, cortisol, and catecholamines are blamed for such life-shortening effects, as long-term exposure leads to exhaustion and breakdown of various biological mechanisms.

Consider antioxidants, for example. An optimal amount of antioxidants in the diet is essential for good health. However, too many antioxidants in the body can have a seemingly paradoxical effect and actually lead to deteriorating health. Researchers have found that an overload of natural antioxidants can actually lead to heart failure due to “reductive stress” – essentially too much of a good thing.

The fact that calorie restriction can have a profound impact on health and longevity has now been confirmed by science.

Hormetic resistance from mild stimulation is believed to be an evolutionarily acquired survival mechanism. By adapting to challenges to overcome adverse environmental

conditions, such as lack of food, your body compensates, making it more robust. Within this context, nutrition-wise, the mild stress imposed by reduced calorie intake stimulates your body to defend itself against insults of disease-causing oxidative stress.

Essentially, your body maximises its energy utilisation by allocating greater resources to your essential defence processes and life supporting systems.

Eating less is likely to be healthier for us in the long run. The benefits of calorie restriction are largely related to a reduction in your insulin levels, which is a major accelerant of ageing.

There are numerous other examples of the hormetic principle in action. Many studies showing no adverse, or even slight benefits, of exposure to low levels of toxins and radiation are likely to be due to hormesis, such as:

Ionizing radiation - -The US Environmental Protection Agency (EPA) has determined that any amount of exposure to ionizing radiation is harmful. The EPA set strict regulatory limits for public exposure to radiation at 15 and 100 mrem (millirem) per year.

However, other experts have discovered that low doses of ionizing radiation do not cause cancer, and could have beneficial effect on your health.

For example, one study revealed that the survivors in Nagasaki, who received 1,000 to 19,000 mrem of radiation, have fewer cases of cancer and are living longer than the non-irradiated population. The radiation hormesis model might also explain why residents living in high-radon-level areas such as Japan, Germany and central Europe have fewer cases of cancer.

However, it's also been well-established that exposure to x-rays may increase cancer and heart disease, as ionizing radiation can cause all manner of structural chromosomal mutations and DNA instability.

Radium – Radioactive products were all the rage in the 1920s and 1930s. Radium-containing “health elixirs” were touted as magical remedies that could promote health and prolong life by rejuvenating effects with a host of widespread benefits.

This was later followed by horror stories of gruesome, painful deaths due to overconsumption. The most famous case was that of Eben Byers, a millionaire steel tycoon and sportsman whose doctor urged him to drink radium-infused water for a bit of extra “zing”. Four years later, his death resulted in the iconic Wall Street Journal headline “The Radium Water Worked Fine Until His Jaw Came Off,” which ended up being the death knell for such radium products.

However, bathing in radon water is still popular. Some 75,000 people a year seek treatment for arthritic and other complaints at a dozen radon spas in Germany, and there are several in Austria, the Czech Republic and Japan.

Exposure to such low-level radiation is under investigation in Japan, where it has been successfully used to suppress cancer by strengthening immune system defences and promoting DNA repair. There is good evidence that low level radon stimulates super-

oxide dismutase, a powerful antioxidant that blocks free radical damage, and ATP, the source of energy for all cells.

The important thing to remember is that you need to make your own decisions about what is safe because the “truth” may not prevail until harm has already been done. You must take control of your health in order to gauge what’s right for you.

VEGAN ACTIVISM

Simple and Easy

“We don’t have to engage in grand, heroic actions to participate in the process of change. Small acts, when multiplied by millions of people, can transform the world.” Howard Zinn

Having strategic, content-based conversations with friends, family and acquaintances about veganism is certainly a powerful way to take the movement forward. So much so, that regular courses are run to help people who want to pick up promotional skills. Street activism, which targets people who might otherwise never encounter the raw reality of animal farming, is also powerful, but it’s not for everyone, and no one can do it every day. Aside from these actions, which many regard as being at the cutting edge of veganism, there are plenty of opportunities to help build an environment that supports cruelty-free change, by helping people encounter more aspects of the vegan message more often. Every encounter contributes to veganism seeming more familiar and less alien, whereby non-vegans can reach a critical “Aha!” moment where they make the connection between their values and their behaviour. Positive vegan messages, vegan items listed on menus and vegan labelling all contribute towards the sense that veganism is easy, mainstream and enjoyable. Establishing a culture where a vegan identity is a positive thing, associated with compassion, health and environmental sustainability helps people become and, importantly, remain vegan.

Here is a list of simple actions that you can take. Some only take seconds and most require very little emotional labour. Perfect for the days when you are feeling down and want the antidote of taking some small positive action.

1. Learn to cook.

Note that I didn’t say, “be able to cook” – very few of us come out of the womb with a julienne peeler in our hand. If you add just one recipe to your repertoire a month, after a year you will be quite handy in the kitchen. YouTube lessons cover every conceivable cooking topic, but the knife skills videos are a very good time investment for new vegans. Learning to cook also silently refutes the most popular criticism of veganism: that vegan food is not pleasurable food to eat.

2. Be healthy.

Yes, raw vegan marathoners set an amazing standard for what is possible, but not all of us want to do that, and some of us may have health issues that will be with us for life. So “be healthy” is relative; feeling happy that your veganism can sit comfortably at the centre of your best, healthiest life is something that will radiate to those around you. Even if you consider yourself to be vegan for the animals, please still eat a wide variety of foods, to avoid the sickly vegan stereotype and the second most common criticism; that being a committed, long-term vegan is harmful to one’s health. People will be more open to the idea of veganism if they have known someone personally who is thriving as a vegan. If you have doubts, a consultation with a vegan nutritionist or dietitian might seem pricey now, but improved eating habits will pay you dividends for all of your life.

3. Be informed.

It is much easier to stay cool, calm and friendly in a discussion when you know your facts and feel confident in them. This stance nicely subverts another common stereotype, of the bleeding heart vegan who has been blackmailed into a life of lettuce by PETA videos.

4. Sharing vegan flyers.

Various vegan and animal rights flyers are available for sale online, but you may have plenty of literature that you’ve accumulated on your way to and through veganism. Now that you know their content, recycle these documents by putting them inside magazines in cafes, doctor’s waiting rooms, train seats and letter boxes. Leave one behind as a bookmark in a book that you are lending or returning. Just don’t put them in the bin.

5. Request that your library stocks books on vegan subjects.

If you have a library card, chances are that you can log into your system and request items. This helps establish demand for vegan titles and means that they are ready on the shelves for the vegan-curious browser. Libraries often display their new acquisitions on a special table, so the frequent arrival of new vegan books helps maintain consciousness of veganism being mainstream and accepted. (We recommend Dr Ann Wigmore’s classic *THE HIPPOCRATES DIET AND HEALTH PROGRAM*.)

6. Post positive (truthful, of course!) reviews of your favourite vegan restaurants.

If you have had a good experience at a vegan or vegan-friendly venue, make sure that the internet knows. Positive reviews drive traffic to restaurants, so this is a key way for us to make sure that businesses that are catering for us get rewarded and prosper.

7. If you don’t have many restaurants...

If you don’t have many restaurants serving solid vegan options in your area, consider giving them some friendly ‘vegucation’. Vegan options can be very cost effective for restaurants, which are always having to keep one eye on their bottom line. You could

send a friendly email letting them know that you would like to eat there, suggest a menu item that fits with their cuisine or give them information about substitutions that vegans will accept (for example, replacing cow's milk cream with coconut cream in a curry.) Keep your tone open and friendly, and you may be pleasantly surprised at the responses you get.

8. If you are in Sydney...

You can get behind the artichoke sticker initiative. Did you know that there is already a program aimed at rewarding restaurants that provide labelled vegan options? Restaurants providing labelled vegan options get a free artichoke sticker and a listing on the Sydney Vegan Club page, to help vegans choose vegan-friendly venues.

9. Write a letter to your MPs to let them know where you stand on animal issues.

Let them know that animal welfare will be a determining factor in how you vote. If the only MPs you ever write to are your own state and federal representatives, that is an excellent start. Writing a short, personal letter supports and reinforces the messages that animal rights lobby groups are working so hard to get across. If MPs never hear from their own constituents it is easy for them to dismiss the work of Animals Australia and others as that of a vocal fringe. Getting personalised letters from voters in their electorate will show them that the treatment of animals is increasingly a mainstream concern.

10. Facebook likes and shares.

Facebook can be much more than sharing confronting images on your timeline. Sharing funny videos and pictures of happy animals doing happy animal things may be easier for your friends and family to engage with, while promoting a message that animals are unique and intelligent, and deserving of kindness. Liking vegan comments in discussions and adding your own is a good way to help reinforce a vegan message and the people who are speaking out for it. If you prefer that your Facebook interactions be invisible to your non-vegan friends, closed Facebook pages allow you to like and comment without any of your friends outside the group seeing. You can be generous with likes and friendly comments in these spaces, knowing that you are building the morale of the movement without affecting your newsfeed.

11. Join an animal protection organisation.

Boosting the numbers of members of organisations increases their power. The Animal Justice Party is always looking for members, and the more members an organisation can claim, the more influence they can show they hold when having discussions about policy. Members make a small financial contribution towards the costs of running the group and in return you will often receive information about the latest actions and achievements that you might not receive from the mainstream press. Being a member is a great way to add your voice to an existing collective to strengthen it, while helping you to stay informed. You might get a side benefit of some stickers and literature to pass on, too.

If you are happy talking to people, but like to do it on your own terms, some of the following ideas might be suitable for you:

1. Display vegan patches, pins and stickers; you can seed little vegan messages all over; the more you do it, the more creative you are likely to become. You can put vegan stickers on wheelie bins, your letter box and on your car. You might even notice a public place that seems to welcome stickers, and put one there.
2. If you have a relationship with a vegetarian or vegan-friendly business, consider asking them to display vegan or animal rights pamphlets. A local vegetarian cafe has started carrying flyers for the Animal Justice Party to raise awareness about their work to improve the lives of animals through changes to the law. A health food store, that predominantly stocks products that are not tested on animals, agreed to have a stack of postcards supporting a campaign to have cosmetics tested on animals banned from sale in Australia.
3. Contribute to vegan education events: Sydney and Melbourne now have regular 'vegucation' events where films are screened, food is offered, and vegans mingle with the vegan-curious. You can contribute to running these events by volunteering, baking, mingling or financially.
4. Similarly, there are animal charities and lobby groups working at every level; from shelters and rescues, to political groups, and awareness-raising societies. If you have the skills and desire to volunteer something, it is likely that you can help out a lot, while having limited direct contact with people. For instance, design and marketing skills for new logos and campaigns are always in demand. For the skilled person this can be done at home, and yet is highly valuable to the movement.