

The Influence of Optimism in Health and the Role of Positive Psychology in Macrobiotics

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Introduction

This paper examines the influence optimism has on health and longevity and explores the role of positive psychology as a part of macrobiotic education and health coaching¹.

Abstract

Research indicates that optimism may extend life by 11% to 15%, reduces the risk of dying early from illness by 50% to 70%, helps overcome challenges and increases the adoption of a more healthy lifestyle.

Macrobiotic philosophy includes many principles that recognise the influence of optimism, positive psychology and an affirmative attitude to life. These can also be used as a basis for teaching, coaching and guiding people to being more optimistic. Given that optimism may have similar health benefits as for healthy eating, there would be additional benefits to including education into being more optimistic in macrobiotic health coaching sessions.

Positive Psychology

Positive psychology focuses on the potentials. It is not targeted at fixing problems, but instead is focused on researching things that make life worth living instead. It operates at three levels.²

1. The subjective level includes the study of positive experiences such as joy, well-being, satisfaction, contentment, happiness, optimism and flow. This level is about feeling good, rather than doing good or being a good person.
2. At the next level, the aim is to identify the constituents of the 'good life' and the personal qualities that are necessary for being a 'good person', through studying human strengths and virtues, future-mindedness, capacity for love, courage, perseverance, forgiveness, originality, wisdom, interpersonal skills and giftedness.
3. Finally, at the group or community level, the emphasis is on civic virtues, social responsibilities, nurturance, altruism, civility, tolerance, work ethics, positive institutions and other factors that contribute to the development of citizenship and communities.

Review of Studies on Health and Optimism

As new research projects are published, there is increasing recognition that optimism has a significant influence on life expectancy and susceptibility to illness.

One of the most famous studies on optimism is known as The Nun Study. Handwritten autobiographies from 180 Catholic nuns, composed when participants were a mean age of 22 years, were scored for emotional content and related to survival during ages 75 to 95. One

¹ Simon Brown. Macrobiotics and Health Coaching. Presented at the International Macrobiotic Conference in Berlin October 2017. <https://www.macrobioticsinternational.com/papers/macrobiotics-and-health-coaching/>

² Positive Psychology <http://positivepsychology.org.uk/what-is-positive-psychology/> 26/11/2020

notable feature of this study is that the subjects lived very similar lifestyles in terms of activities, diet and environment. A strong inverse association was found between positive emotional content in these writings and risk of mortality in late life. As the quartile ranking of positive emotion in early life increased, there was a stepwise decrease in risk of mortality resulting in a 2.5-fold difference between the lowest and highest quartiles. Positive emotional content in early-life autobiographies was strongly associated with longevity six decades later.³

A study by Boston University School of Medicine published in 2019 was based on 69,744 women and 1,429 men. Both groups completed survey measures to assess their level of optimism, as well as their overall health and health habits such as diet, smoking and alcohol use. The women were followed for 10 years, while the men were followed for 30 years. When individuals were compared based on their initial levels of optimism, the researchers found that the most optimistic men and women demonstrated, on average, an 11 to 15 percent longer lifespan, and had 50-70 percent greater odds of reaching 85 years old compared to the least optimistic groups. When the influence of age and demographic factors such as educational attainment, chronic diseases, depression and also health behaviours, such as alcohol use, exercise, diet and primary care visits were included, the results were maintained.⁴

Although ageing is generally perceived as a biologically determined process, the literature increasingly points to the importance of psychological factors in the ageing process, specifically age-related stereotypes or cognitive mindsets. Such stereotypes reflect self-perceptions and others' perceptions about the ageing process and can have a strong influence on health and life satisfaction, specifically through self-fulfilling prophecy mechanisms.⁵

In a review of Positive Psychology on Physical Health, first published in 2014, research shows that positive health assets predict good health assessed in a variety of ways. Among the positive psychology health assets foreshadowing good health are

- Positive emotions
- Life satisfaction
- Optimism
- Forgiveness
- Self-regulation
- Vitality and zest
- Life meaning and purpose
- Helping others and volunteering
- Good social relationships
- Spirituality and religiosity

Various research methods, including longitudinal prospective and experimental designs show that positive psychological characteristics affect health and longevity.⁶

³ Deborah D. Danner, David A. Snowdon, and Wallace V. Friesen 'Positive Emotions in Early Life and Longevity: Findings from the Nun Study' *Journal of Personality and Social Psychology*, 2001, Vol. 80, No. 5, 804-813. <https://www.apa.org/pubs/journals/releases/psp805804.pdf>

⁴ Lewina O. Lee, Peter James, Emily S. Zevon, Et. All, 'Optimism is associated with exceptional longevity in 2 epidemiologic cohorts of men and women', *PNAS*, 2019, Vol. 116, No. 37, 18357-18362; first published August 26, 2019; <https://doi.org/10.1073/pnas.1900712116>

⁵ Francesco Pagnini, Cesare Cavalera, Eleonora Volpato, et al. Ageing as a mindset: a study protocol to rejuvenate older adults with a counterclockwise psychological intervention. *BMJ Journals* Volume 9, Issue 7 <https://bmjopen.bmj.com/content/9/7/e030411.full>

⁶ Nansook Park, PhD, Christopher Peterson, PhD,† Daniel Szvarca, BS, et al. Positive Psychology and Physical Health. *Am J Lifestyle Med*. 2016 May-Jun; 10(3): 200–206.

‘a happy, engaged, and fulfilling psychological and social life is not just a consequence of good health, it is what leads people to live a healthy and long life.’

Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.

—World Health Organization⁷

To put the claim of 11% to 15% increased longevity due to greater optimism into perspective, this is similar to the benefits of healthy eating. A study examining Seventh Day Adventists in North America suggested that vegetarians and vegans may benefit from a 12% lower risk of early death, when compared with people who eat meat. Vegans had a 15% lower risk of dying prematurely from all causes, indicating that a vegan diet may indeed help people live longer.⁸ The Seventh Day Adventist diet is one where, ‘Each member eats a little differently and their food choices may consist of fruits, vegetables, whole grains, legumes, dairy products, and healthy fats such as olive oil. Most Seventh-day Adventists (SDA) try to stay away from processed foods, sugar, sugar substitutes, and food additives.’⁹ This is similar to typical macrobiotic patterns of eating. These results were not repeated in other studies of vegetarians.

In another study by Imperial University published in 2017, eating 10 portions of vegetables and fruit a day resulted in a 15% reduction in the risk of premature death, along with significant reductions in risk of mortality from specific illnesses.¹⁰

This suggests that optimism may have a similar influence on health as healthy eating and therefore that to best help macrobiotic students and patients, the many aspects of positive thinking that are part of macrobiotic philosophy should be included in education and recommendations.

One way in which optimism may influence physical well-being is through promotion of a healthy lifestyle. It is thought that optimism facilitates adaptive behaviours and cognitive responses that help negative information be processed more efficiently and that are associated with a greater flexibility and problem-solving capacity. These coping strategies are predictive of behaviours that help avoid health issues and if necessary help one face health problems positively.¹¹

In some studies, more optimistic groups enjoy healthier outcomes because optimistic people tend to choose more healthy lifestyles.¹² However, the Nun Study counters this by measuring the outcomes of more optimistic women who lead a lifestyle and eat a diet that is common to the cohort.

⁷ World Health Organization. Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946 Official Records of the World Health Organization. Geneva, Switzerland: World Health Organization; 1946.

⁸ Dr. Michael J. Orlich, MD, Dr. Pramil N Singh, et al. Vegetarian Dietary Patterns and Mortality in Adventist Health Study 2. *JAMA Intern Med.* 2013;173(13):1230-1238. doi:10.1001/jamainternmed.2013.6473

⁹ <https://www.seventhdayadventistdiet.com/what-do-seventh-day-adventists-eat/>

¹⁰ Dagfinn Aune, Edward Giovannucci, Paolo Boffetta, et al. Fruit and vegetable intake and the risk of cardiovascular disease, total cancer and all-cause mortality—a systematic review and dose-response meta-analysis of prospective studies *International Journal of Epidemiology*, Volume 46, Issue 3, June 2017, Pages 1029–1056, <https://doi.org/10.1093/ije/dyw319>

¹¹ Ciro Conversano, Alessandro Rotondo, Elena Lensi, et al. Optimism and Its Impact on Mental and Physical Well-Being. *Clin Pract Epidemiol Ment Health.* 2010; 6: 25–29.

¹² *Ibid*

Placebos and Nocebos

The role of placebos is so well established that any research in new medications has to be compared to the effect of a placebo.¹³ For example, if someone believes a herb tea will help him or her feel less pain, there is a significant possibility the pain will recede after drinking the tea. The belief alone is enough to bring about some kind of healing. This mind over matter scenario is well documented with reports of many benefits.

Nocebos are similar to placebos but work in the opposite way. If someone consumes a food believed to cause indigestion, then there is a reasonable probability that it will lead to indigestion. People can believe themselves into poor health. The New Scientist reported on a man who was diagnosed with liver cancer and given a few months to live. He died on schedule only for the autopsy to reveal his liver condition had been misdiagnosed. The man had died of the diagnosis.¹⁴

The placebo effect is well accepted and medicines are required to produce better outcomes than those experienced by people taking an inert pill that acts as the placebo for the control group. Interestingly, there is a nocebo effect where about 23% of those taking the inert control medication (for example vitamin C pills) report negative side effects and when patients are asked about possible side effects this rises to 27% to 71%.¹⁵

The message is that if we believe in ourselves and our ability to heal, that will increase the chances of being healthy. Once we start to allow thoughts of poor health and general hypochondria to invade our mental state, we compromise our health.

This suggests that when working with people, we would be more successful focusing on the benefits of healthy food to promote optimism and possibly gain the benefits of the placebo effect, rather than promoting the negatives of certain foods and the risk creating a potentially harmful nocebo effect.

The chart below suggests that the greatest health benefits in terms of cardiovascular disease, type two diabetes and neoplasms will be derived from what is included in a diet rather than what is taken out.¹⁶

Increasing whole grains, fruits, nuts and seeds, vegetables, seafoods, fibre, polyunsaturated fatty acids and legumes, are more effective than reducing sodium, trans fats (hydrogenated fats), sugar and meat. The implication is that it is more important to recommend positive change in terms what a patient does eat, than focus on what not to eat. This is the similar to focussing on the placebos rather than the nocebos.

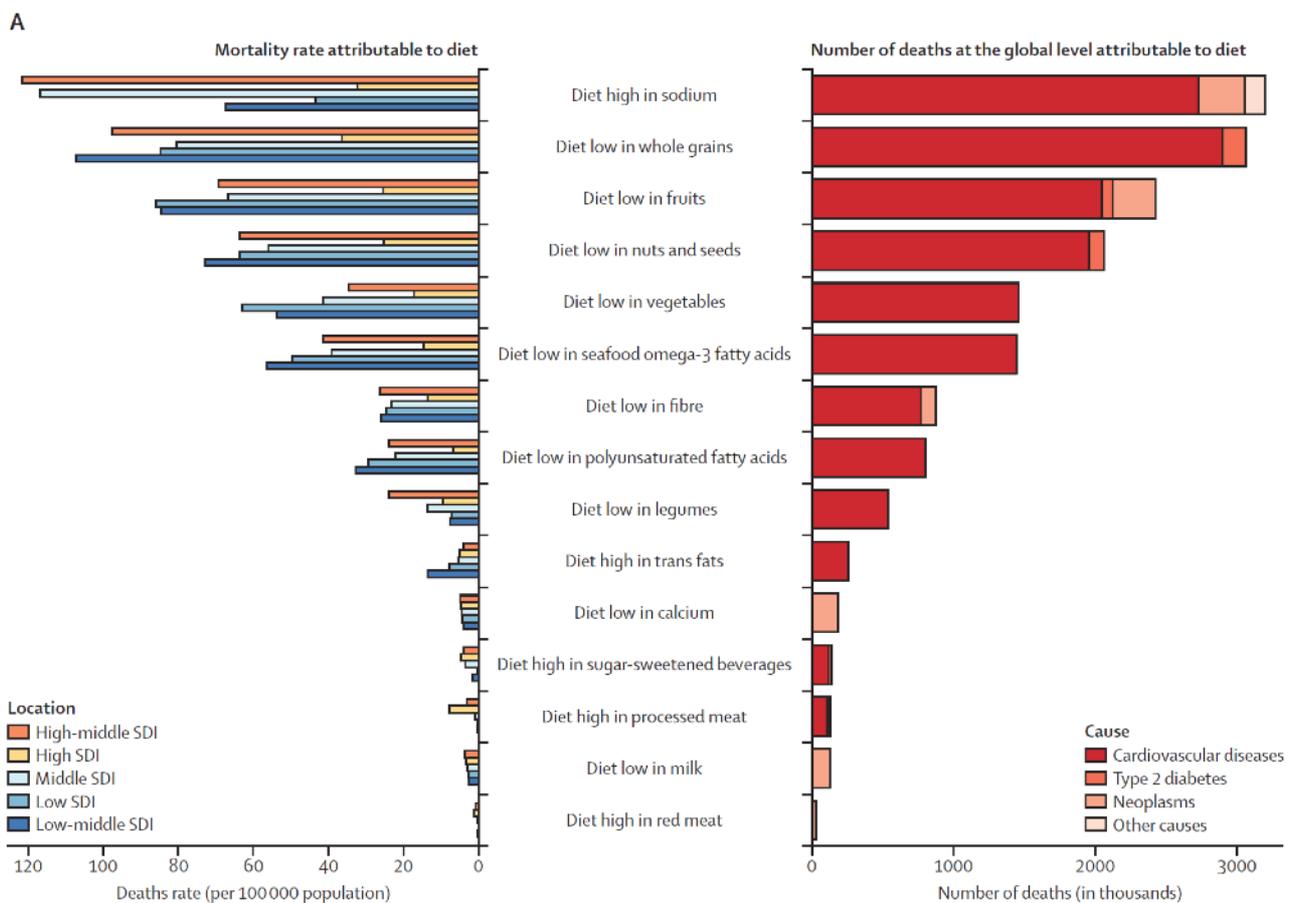
When it is clearly in the patient's best interest to avoid a particular food, we can use the substitution method where we introduce an alternative that becomes a placebo and point of positive action. For example whole grains rather than refined grains, olive oil or tahini instead of butter, tea instead of coffee, syrups or dried fruit instead of added refined sugar, and humus instead of cheese etc.

¹³ Usha Gupta and Menka Verma. Placebo in clinical trials. [Perspect Clin Res](#). 2013 Jan-Mar; 4(1): 49–52.

¹⁴ The nocebo effect. Magazine issue 2724, published 5 September 2009. <https://www.newscientist.com/article/mg20327247-100-13-more-things-the-nocebo-effect/>

¹⁵ Arthur J. Barsky, MD Ralph Saintfort, MD Malcolm P. Rogers, MD Jonathan F. Borus, MD. Nonspecific Medication Side Effects and the Nocebo Phenomenon. JAMA, February 6, 2002—Vol 287, No. 5. <http://depts.washington.edu/psychres/wordpress/wp-content/uploads/2017/07/100-Papers-in-Clinical-Psychiatry-Psychosomatic-Medicine-Nonspecific-medication-side-effects-and-the-nocebo-phenomenon..pdf>

¹⁶ Health effects of dietary risks in 195 countries, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet* 2019; 393: 1958–72
Published Online April 3, 2019 [http://dx.doi.org/10.1016/S0140-6736\(19\)30041-8](http://dx.doi.org/10.1016/S0140-6736(19)30041-8)



Optimism Applied to Dietary and Lifestyle Changes

Several studies have analysed the correlations between optimism and healthy behaviours. In particular in a sample of males and females aged between 65 – 80 years, Steptoe *et al.* found that optimism was correlated with healthy behaviours such as abstaining from smoking, moderate consumption of alcohol, the habit of walking briskly and regular physical activity, regardless of demographical factors, current psycho-physical conditions and body mass.¹⁷

Essentially the more optimistic a patient is regarding making changes to his or her life, the more likely those changes will be made. This suggests care is required to present and recommend changes with the choices and agreement of the patient, so the patient only takes on recommendations that can be reasonably made. Too many recommendations and recommendations that might be perceived as unreasonable by the patient, risk overwhelming the patient and increasing the risk of lower self-esteem and feelings of pessimism.

References in Traditional Macrobiotic Literature to Optimism

Macrobiotics is best known as an approach to eating. However, many of the principles are focused on thinking and attitude to life. In a sense, it is the philosophy that makes macrobiotics a holistic approach to health, combining food with a positive approach to life. This is primarily what makes Ohsawa's macrobiotics different from the original natural whole food diet of his mentor Sagen Ishizuka. It was in the philosophy that Ohsawa, the modern day founder of macrobiotics, put great attention.

¹⁷ Ciro Conversano, Alessandro Rotondo, Elena Lensi, et al. Optimism and Its Impact on Mental and Physical Well-Being. *Clin Pract Epidemiol Ment Health*. 2010; 6: 25–29. Published online 2010 May 14. doi: [10.2174/1745017901006010025](https://doi.org/10.2174/1745017901006010025)

Ohsawa combined a natural food diet with exercise, good sleep, enjoying healthy emotions and a positive approach to living. There is a focus on self-help, developing one's self and learning from challenges.

Ohsawa's Seven Conditions of Health define a holistic view of health. These include enjoying vitality, an appetite for natural foods, good sleep, good memory, healthy emotions, clear positive thinking and a focus on appreciating life. Four of the seven attributes focus on the mind in terms of memory, emotions, thinking and appreciation.¹⁸

Similarly Ohsawa wrote of Seven Stages of Judgement that were partially based on the stages of consciousness that a human might experience through a lifetime.¹⁹ These were made up of mechanical responses, the senses, recognising feelings, developing intellect, social awareness, a philosophy of life, being loving. Again of the seven stages, four focus on the mind in terms of the intellectual, social, ideological and love.

Ohsawa and current macrobiotic thinkers give emphasis to Thinking For Ourselves²⁰, Non Credo²¹ (Non belief), Beginners Mind²², Taking Responsibility²³, Not Blaming, Developing Curiosity and Education²⁴, Embracing Challenges²⁵ and Accepting Change. These combine to help develop human qualities of learning through questions, being self-reliant, mindfulness, trying out different ideas and developing through challenges.²⁶

When taken together, there are many macrobiotic principles that not only recognise the role of optimism in health but also provide a starting point for being more optimistic.

There is then a need to add practical processes, activities and exercises to help patients enjoy greater optimism. These include:

- Gratitude and being able to appreciate challenges and difficult people in our lives.
- Being loving to self and others, and enjoying a love of life, including being loving to those that create the most problems in our lives.
- Continuous learning and education, being the eternal student.
- Self development through self-reflection.
- Being engaged in society and seeking to be fair.
- Creating a philosophy of life.
- Developing an open and freer mind, with less limiting beliefs.
- Adopting the biggest perspective of life.
- Gaining greater control of life through self discipline and responsibility.

Positive Thinking and Emotions

Adopting a more optimistic approach to life does not imply that living in a permanently happy state is desirable. It is recognised that as sentient beings, humans will typically experience a range of emotions. The issue arises when a particular emotion occurs with greater frequency and

¹⁸ Herman Aihara, 'The Seventh Condition of Health', *Kaleidoscope* December 1980.

¹⁹ George Ohsawa, Edited by Carl Ferre, *Essential Ohsawa*, (George Ohsawa Macrobiotic Foundation 1994) Page 73.

²⁰ *Ibid.* Page 2.

²¹ *Ibid.* Page 2.

²² *Ibid.* Page 167.

²³ *Ibid.* Page 62.

²⁴ *Ibid.* Page 55.

²⁵ *Ibid.* Pages 3, 39 and 191.

²⁶ Simon Brown, Carl Ferre, Anna Mackenzie, Isabel Moreno, Denny Waxman. *Macrobiotic Principles and Values*. Macrobiotics International 2018.

intensity over a longer time. For example, long-term stress, depression and anxiety have been shown to contribute to heart disease, asthma, strokes, diabetes, arthritis and some types of cancer²⁷. This suggests that strategies to recognise and then move on from frequent repetitive emotions are helpful.

Various researchers have found that daily writing about emotions can have a positive influence on health when compared with control group performing similar writing tasks without focussing on emotions²⁸. Recognising, accepting and expressing these emotions is part of a physical, mental and emotional wellbeing. At the same time when faced with challenges people can be solution orientated and look for constructive, affirmative perceptions and actions. More than that people can develop the habit of appreciating the beauty, positives and strengths one's self, other people and life.

Health Coaching Techniques to Increase Optimism

The various macrobiotic principles on thinking can be readily turned into intentions as part of a health coaching action plan. These can typically include any of the following and in a health coaching methodology be selected by the patient as an activity that they can do and personally benefit from.

- Continuous development of a written list of self-assessed positive qualities, including using colours, decoration, rewrites and updates.
- Keeping a gratitude diary.
- Reading books on positive thinking and research on positive psychology.
- Exploring positive aspects of philosophy.
- Learning new skills.
- Ongoing education.
- Using a positive language. Practicing starting affirmative statements with 'I am...'
- Exploring subjects like neuro linguistic programming (NLP) and emotional freedom technique (EFT).
- Practicing meditation and mindfulness.
- Volunteering at charities and being in service to people in need.
- Developing a philosophy of life and writing out personal values and ethics.
- Examining beliefs and asking what kind of emotions the beliefs produce.
- Identifying areas in life a person can take control and responsibility over.
- Identifying the positives in challenges and the opportunities in times of change.
- Set periods for new actions and behaviours so they have a clear start and end point.
- Start an action, like getting ready to go to the gym, and taking small steps towards the goal of engaging in exercise.

Optimism as a Part of Macrobiotic Health Coaching

Patients coming to macrobiotic health coaching due to poor physical health typically will already be experiencing low self-esteem²⁹. A physical health issue can lead to the patient to lose confidence in his or her body with an associated reduction of health esteem. For this reason, increasing self-esteem and optimism is one of the desired outcomes of the macrobiotic health coaching session. Not only will optimism improve health but also increase the patient's ability to adopt agreed upon lifestyle changes.

²⁷ NHS <https://www.nhs.uk/oneyou/for-your-body/stress-less/> 26/11/2020

²⁸ Richard Slatcher and James W. Pennebaker. Emotional Expression and Health. Cambridge Handbook of Psychology, Health & Medicine (pp.84-87) Edition: 2nd Publisher: Cambridge University Press. January 2007. https://www.researchgate.net/publication/234155533_Emotional_Expression_and_Health

²⁹ Donald C. Reitzes, Elizabeth J. Mutran. Self and Health: Factors That Encourage Self-Esteem and Functional Health. *The Journals of Gerontology: Series B*, Volume 61, Issue 1, January 2006, Pages S44–S51, <https://doi.org/10.1093/geronb/61.1.S44>

Fear is a powerful emotion and there is the risk that fear based information will be exaggerated in patients minds and dominate their thinking about themselves and their lifestyle.

Education in optimism and positive thinking can be part of macrobiotic health coaching sessions. This can be achieved through a mutually agreed upon action plan. In addition the macrobiotic health coach can seek to emphasise the patient's strengths as learnt from the patients account and description. These strengths can be learnt directly by asking the patient to list his or her strengths. Further macrobiotic theories of YinYang and Five Transformations also can be applied to identify strengths in a non-judgmental language. The macrobiotic health coach can adopt a positive, optimistic language that focuses on increasing the potential placebos effect and helps instil a sense of optimism in the patient. Clearly this also needs to lead to other lifestyle and dietary changes that have been established to improve health.

Conclusion

Macrobiotic education and health coaching can be provided through the use of a positive language where the affirmative actions and choices are emphasised. This can include emphasis of people's strengths, recommending healthy foods and suggesting healthy lifestyle activities. The research suggests that focussing on positives, such as what to eat encourages placebos and reduces the risk of introducing nocebos. This approach is more likely to lead to positive outcomes in terms of patients ability to make positive health changes to their diet and lifestyle.

In addition within macrobiotics there are many principles that can form part of coaching people to be more optimistic, positive and affirmative. This in itself can lead to better health and greater longevity.

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