

Chapter 6

John Harvey Kellogg: A Case Study of Transforming Health Science

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Introduction

John Harvey Kellogg MD (1852-1943) may be described as a man of vision and action. Schwarz refers to him as an “early proponent of preventive medicine”, “who changed many of America’s eating habits.”¹ However, he was much more than a dynamic, health-focused enthusiast. Other notable skills intertwined with his spiritually-oriented interest in human wellbeing.² He was known as a creative innovator, capable administrator and an astute business entrepreneur. In one sense he lived ahead of his time, always seeking to extend the boundaries of commonly accepted health beliefs and practices. However, he was also confined to the cultural framework of his time and was strongly influenced by what Knight describes as “the fragility of life in the nineteenth century.”³ His was an era which experienced rapid advancements in medical science⁴ and which also witnessed an emerging divide between science and religion.⁵

In this paper the nature of Kellogg’s contribution to raising societal awareness of healthful living will be explored and it will be argued that the evaluation of his impact requires a reflective assessment of his creative genius against the backdrop of three interrelated areas: a) the early American health reform movements, b) progressive developments in medical science, and c) the Seventh-day Adventist journey towards an holistic view of health. In addition, it is asserted that Kellogg’s transforming and visionary influence was crystallised within the context of these ‘triangulated tensions. It was Kellogg’s creative resolution of these tensions which resulted the Adventist health message being established on a scientific and research-based foundation. This synthesis has been a key factor in the subsequent

growth in, and recognition of, Adventist health institutions around the world.

The Dawn of a New Era

In 1864 the twelve-year-old John Harvey Kellogg appeared on the scene of the progressively expanding Seventh-day Adventist movement. Only three years before, in October, 1860, the post-Millerite Sabbatarian Adventists had adopted the name "Seventh-day Adventists" and in May, 1863, they had formed an official church organization. These events occurred within the vortex of social and political upheavals aimed at achieving the idealised American society.⁶ From this dream emerged a new interest in human wellbeing that in turn contributed to the formation of numerous health reform movements. The emerging interest in a health-oriented lifestyle was certainly needed, given the prevailing ignorance of appropriate sanitary, medical and dietary practices.⁷

Amidst the backdrop of political struggles, conflicts and war, the Emancipation Proclamation of January 1, 1863, gave birth to a "great new hope", "the redemption of the enslaved people."⁸ It declared, "that all persons held as slaves ... are, and henceforward shall be free."⁹ This Proclamation did not end slavery immediately but "it captured the hearts and imagination of millions of Americans and fundamentally transformed the character of the war."¹⁰

On Friday, June 5, 1863, Ellen White, one of the founding members of the Seventh-day Adventist Church, received a vision on the subject of health known as the "Otsego Vision."¹¹ This vision commenced the liberation of the church from the slavery of intemperate lifestyles.¹² In a manuscript dated June 6, Ellen White wrote:

I saw that now we should take special care of the health God has given us ... I saw that we should encourage a cheerful, hopeful, peaceful frame of mind, for our health depends upon our doing this. I saw that it was for everyone to have a care for his health, but especially should we turn attention to our health, and take time to devote to our health that we may in a degree recover from the effects of overdoing and overtaxing the mind.¹³

The Otsego vision guided the church to adopt several basic health reforms which had been enunciated during the previous quarter of a century, such as vegetarianism, the need for fresh air and exercise and also abstinence from stimulants.¹⁴ Although some of these practices had faithful followers within Seventh-day Adventism they had never seriously appealed to, or been adopted by, the fledgling church as a whole.¹⁵ The Otsego vision attracted attention to the value of a balanced, temperate lifestyle, effective nourishment and good health and all in the wider context of spiritual nourishment.¹⁶ It emphasized the vital role played by an integrated lifestyle in the healing of the heart, mind and attitude.

While this new emphasis on healthful living did not initiate an immediate radical change, it gradually captured the hearts of Seventh-day Adventists, directing attention to the essential elements of holistic wellbeing. The nexus between physical and spiritual health would become a vital component of Adventism's mission for the world.¹⁷

At the same time the new focus presented challenges, a number of which were medical in nature. As suggested by Reid, the basic health principles adopted "stood exposed to an ever-changing critique from scientific development."¹⁸ Furthermore, as elaborated by Schwarz, contemporary "advances within the regular medical profession in antisepsis, bacteriology, and pathology began to steal the reformers' thunder."¹⁹ Land argued that, due to these advances, "physicians increasingly attended to their patients' diseases in the laboratory and neglected the holistic nature of human health."²⁰ Clearly such reductionist tendencies were in some tension with the more integrated "lifestyle" emphasis of the Otsego message. In addition, there were also many other competing health-oriented views and practices such as "gymnastics and a physical culture program by Dio Lewis."²¹

Another challenge stemmed from the lack of scientific data supporting the effectiveness of the Adventist preventive health principles, although, as argued by Numbers, the early health reforms did indeed provide a "comprehensive system for maintaining good health". Another problem arose from the need to go beyond preventive medicine, good as it may have been. As noted by Numbers, "What lacked was an effective means of restoring health once it was lost."²²

Other difficulties arose from the religious views commonly associated with health reforms. Many of the American health reform movements of the 1830s were closely tied to the theological framework of Utopian dreams calling for “reform in behavior”²³ which would “make the United States a righteous nation.”²⁴ However, while these post-millennial theological views stressed an obligation to obey the laws governing healthful living they failed to emphasize the relationship between a healthy lifestyle and the spiritual quality of life.²⁵

These challenges placed the three interrelated health perspectives (health/religion, health/science and health/SDA holistic lifestyle) in a progressively developing tension, as illustrated in Figure 7.1.

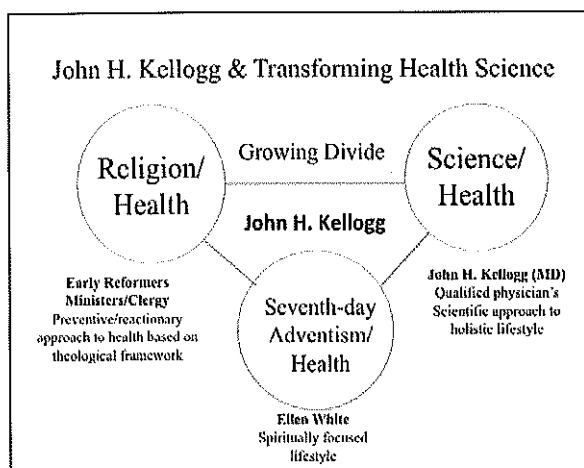


Figure 7.1 John H. Kellogg and the transformation of Adventist health science

In this context Ellen and James White were confronted with a significant dilemma. One option was to move with the progressive developments being ushered in by the emerging medical science, and risk losing the familiar landmarks. The alternative was to retreat back into the old status quo using treatments such as the water cure, and thus risk further irrelevance in a rapidly changing society. The answer came in the person of the young John Harvey Kellogg, who visited the

White's home one day in the spring of 1864. He was to inherit, and substantially resolve, the triangulated tensions shown in Figure 7.1.

The Emerging Challenge

The small size of the Adventist community at Battle Creek meant that the young Kellogg's strong work ethic and exceptional mental ability came readily to James White's notice. He invited the young boy to learn the printing trade at the office of the *Review and Herald*.²⁶ Soon, his exceptional talent took him beyond the ordinary, mundane tasks of the trade. He not only learnt to set type but demonstrated a proficiency in the area of editorial work on the manuscripts. In this capacity, he was not only exposed to Ellen White's views on health but also to the works of the early American health reformers.

As soon as Ellen White began to write on the subject of health many noted a close similarity between her views and those of earlier health reformers.²⁷ In fact, there was ongoing contact with many of these leading figures. After publishing the chapter entitled "Health" in *Spiritual Gifts* (August 1864), Ellen and James White had visited Dr Caleb Jackson's Dansville clinic to observe his water-cure treatments.²⁸ They also invited Dr Russell T. Trall to present a series of health lectures in Battle Creek. Furthermore, the series of six pamphlets entitled "Health, and How to Live," published in 1865, included Ellen White's contributions along with reprints of articles by Graham, Coles, Trall, Jackson and Dio Lewis. It appears that Kellogg acquired the openness and flexibility to learn from other sources. This open-minded and inclusive environment shaped Kellogg's understanding of healthful living. It also helped him to develop the principle of *eclectic adaptation* and a thirst for *practical experimentation*.²⁹

By the late 1860s the Whites were confronting the challenge of integration with the burgeoning age of scientific medicine with some force. Schwarz makes the following observation:

James White probably more than most Adventist leaders, recognized that in the changing climate of medicine, any attempt to secure a hearing for Adventist health principles would require as a base a sound knowledge of anatomy, physiology and chemistry. The denomination needed

Adventist physicians trained in schools that paid attention to new medical discoveries.³⁰

Accordingly, John Harvey Kellogg was encouraged by the Whites to complete medical studies. He commenced his training at the Hygeio-Therapeutic College under the auspices of Trall³¹ and followed this with time studying at the Michigan State Normal School. He then enrolled in the respected medical training program at Bellevue Hospital Medical College, from which he graduated with an MD degree in 1875.

In 1876 Kellogg accepted an appointment as the medical director and physician-in-chief at the church's Western Health Reform Institute. In this position he soon began to shape a new pathway for the Seventh-day Adventist approach to healthful living. His openness to scientific knowledge and experimentation, linked with his high levels of creativity, enabled him to reinvent the basic Adventist health principles in a way that withstood "microscopic" scrutiny by the emerging medical science establishment. Kellogg's willingness to function within, and even spearhead, the new medical paradigms vastly increased the influence of the church's health message outside Adventism.

From Health Reform to Health Science

Kellogg's passion to transform the prevailing conditions and mindsets of his time stemmed from three main factors: his personal convictions, a radically reformed personal lifestyle and a thirst for experimentation. His genius enabled young Kellogg to perceive the triangulated tensions earlier noted not as difficulties but as opportunities. His creative mind was then fueled with a passion to search for new modes of medical thought which were true to the old landmarks but at the same time relevant to the needs of the changing world. There was certainly a demonstrable value in the health reform landmarks with their emphasis on a healthy lifestyle, proper eating habits, good nutrition, physical fitness, fresh air, hygiene and the avoidance of tea and coffee.

However, many of the early health principles and practices had emerged as reactionary responses to the heroic medical treatments offered by the majority of physicians at that time, including many with

prestigious qualifications, and as a reaction to poor personal hygiene, disastrous eating habits and the prevailing lack of adequate sanitation.³² In 1860, while extolling the healing power and therapeutic benefits of nature, Dr Holmes dismissed the medical practices of his time by noting that, "If the whole *materia medica*, as now used, could be sunk to the bottom of the sea, it would be all the better for mankind — and all the worse for the fishes."³³ While a more scientific approach to health was being broadly adopted by physicians, there were still some practitioners in 1860 who adhered to the old "four humor" approach in treating disease.³⁴

By the time Kellogg appeared on the scene, the use of natural remedies had reached a substantial peak. Health reformers such as Trall linked good health with a change in lifestyle rather than "quick-fix" therapeutic treatments alone. The use of hydrotherapy offered a more preferable curative option, one of "healing without drugs."³⁵ These practices, together with the progressive developments in medical science, provided the foundational springboard for Kellogg's success.³⁶ However, he believed that the basic naturalistic approach of healthful living propagated by the early health reformers "needed to be rationalized and made more scientific."³⁷

Practitioners of medical science progressively introduced new, exciting and successful theories and practices based on research rather than on the past "trial and error inventiveness."³⁸ The most notable of these were Louis Pasteur's germ theory and Joseph Lister's use of carbolic acid during surgery as an antiseptic. Even though Kellogg's graduating thesis, "*What is Disease?*", reflected many of Trall's views on natural hygiene it is important to note the influence of the new theories on his approach to the treatment of disease. He aimed to "seek out the cause of the disease" and to correct it, rather than "administering palliatives."³⁹ Both the "seeking" and the "correction" in this case implied research and experimentation. However, the process of changing habitual lifestyle practices in nineteenth-century America proved to be slow and was not without setbacks.

Kellogg's main contribution to the development of a healthy lifestyle may be understood as the provision of a bridging link between the past and the progressively changing world. His synthesis encapsulated the basic elements of the natural remedies in what he referred to as

biologic living.⁴⁰ As illustrated in Figure 7.2, this integrated system maintained a connection with the thoughts and ideas of the early health reformers and Ellen White.⁴¹ Simultaneously, Kellogg's openness to scientific discoveries opened a pathway towards a new visionary direction. Such progressive adaptation to new circumstances would not only benefit the wellbeing of the Seventh-Adventist community, but also of the wider American society.

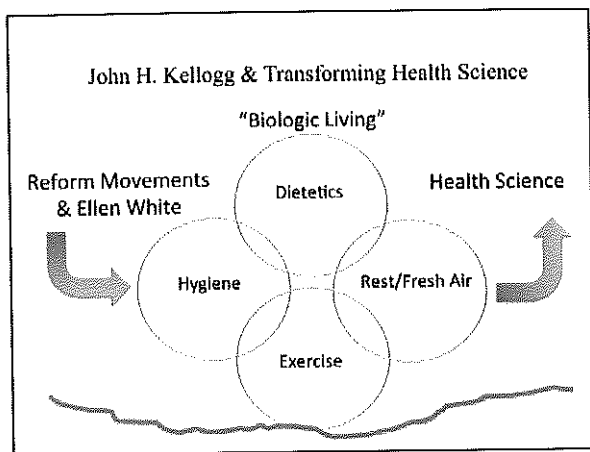


Figure 7.2 Biologic living

One might well ask if there were any unique elements within Kellogg's *biologic living*? The answer seems to be that even though he often defended the importance of healthful living using biblical arguments,⁴² his determination to identify with the new medical discoveries placed the principles of biologic living under the scrutiny of clinical investigation. It needs to be noted that this shift towards a scientifically oriented understanding of healthful living created also in Kellogg's mind a stage of *transitional dichotomy* defined in this study as a natural process of *contextualised adaptation* to new circumstances. Kellogg expressed it clearly in his book, *Harmony of Science and the Bible* (1879):

The so-called conflict between science and religion, as marked before, has been not really such, but rather an encounter between the blind, bigoted, unreasoning, and unreasonable zeal of the religionists, and too often, the vain, blustering arrogant assumptions of the scientists.⁴³

In the same context he defended the value of scientific study, claiming that “the study of nature, of science, does not make men infidels.”⁴⁴ Rather, the study of nature opens “the mysteries of the Almighty” and “every new discovery opens up to him broader views of the wisdom and goodness of the Author of all existence.”⁴⁵

Holding these views it is not surprising that, as pointed out by Wilson, “Kellogg equipped the Sanitarium with laboratories designed to prove scientifically the truth of his physiological theories and the validity of his empirical observation.”⁴⁶ Furthermore, Kellogg’s research-oriented approach to the study of the natural remedies reinforced the value of beneficial lifestyle attributes such as “good digestion, sound sleep, a clear head, a placid mind, content and joy to be alive.”⁴⁷ His broad-minded approach to the “progressive nature of understanding” went hand-in-hand with the advances in medical knowledge, demonstrating their practical value to health, comfort, efficiency, long life.⁴⁸ Bull and Lockhart state that, “the key essence of biologic living—was making sick people well and keeping them well when they attained good health.”⁴⁹

However, in contrast to the early health reformers and Ellen White, Kellogg functioned as an educated and progressive scientist. In this capacity and from the perspective of progressive knowledge he transformed the simple natural remedies into significant pillars of health science. More importantly, by tapping into the spinning wheels of progress, he placed Seventh-day Adventism in the milieu of a changing world, one which many of his Adventist contemporaries were hesitant to embrace. In doing so, as stated by Bull and Lockhart, he slowly began to redefine the nature of Adventism.⁵⁰ While some might consider this process to have been totally detrimental to the nature of Seventh-day Adventist identity it is suggested that it needs to be considered as a positive step towards the contextualisation of Adventist life in a changing world. In order to retain the relevance of its faith the growing movement needed to identify with the surrounding society not from a distant and isolated island of out-moded exclusiveness but from a deep and engaged empathy with the pain and hurt of human life.⁵¹ Sometime later, reflecting on the nature of health-oriented mission, Ellen White penned the following words:

The life of Christ established a religion in which there is no

caste, a religion by which Jew and Gentile, free and bond, are linked in a common brotherhood, equal before God. No question of policy influenced His movements. He made no difference between neighbours and strangers, friends and enemies. That which appealed to His heart was a soul thirsting for the waters of life.⁵²

Because of the unfortunate and deeply rooted administrative and theological controversies which erupted around Kellogg in later years it is easy for Adventists to evaluate his accomplishments through negative lenses.⁵³ However, in the context of its time, Kellogg's focus on 'biologic living' directed the attention of Seventh-day Adventists to a broader view of mission, expressed by Ellen White as souls "thirsting for the waters of life." In Kellogg's mind it meant more than the practised status quo of a cognitively oriented gospel. "If ever there was a time when the truth pertaining to simple wholesome living was essential, it is now; if there was a time when the preaching of the whole gospel of salvation for the soul and the body was needed, it is certainly now."⁵⁴ Many of his contemporaries viewed Christ's mission to the world in terms of informative proclamation of truth. Wilson's citation of Butler's response to Kellogg highlights this point: "It is an excellent thing to heal the sick; encourage the suffering; do good to those who are in great need of help; alleviate pain – that is all good, but my Brother, the salvation of God in his everlasting kingdom, and preparation for the coming of Christ is more than that."⁵⁵ However, Kellogg's vision placed the focus on human wellbeing at the centre of life's journey. In the vortex of the progressive changes and the scrutiny of the scientific critique, the basic health principles would stand the test of time.

Transforming Impact of Biologic Living

As shown in Figure 7.3, Kellogg's biologic living incorporated the basic integral components of a balanced lifestyle.

At the same time, the influence of his biologic living extended beyond applications to personal wellbeing. The transforming nature of health and its impact on human wellbeing began to exert an impact on larger societal issues. Kellogg's focus on vegetarianism related not only to

unhealthy and unbalanced diets, overconsumption, and excessive weight on a personal or individual level but to issues of public health.

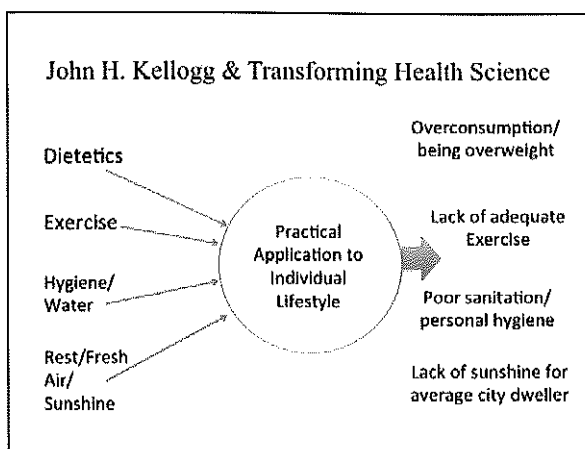


Figure 7.3 The basic integral components of a balanced lifestyle

This vision of a happier society through healthful living was years ahead of its time. His advocating of grain-based vegetarianism led directly to his invention of a number of significant health products such as soya foods and breakfast cereals, some of which were successfully commercialised by his brother Will K. Kellogg. His productive drive has certainly changed the dietary habits of millions. Further, his concern for those who lacked what he saw as necessary exposure to sunlight led to his invention of artificial sunbath equipment. He took the view that such exposure “increased a person’s resistance to colds, influenza, and other respiratory diseases.”⁵⁶ This was one of very few views held by Kellogg which is at some variance with modern medical science.

However, Kellogg’s view of biologic living embraced a much wider perspective, including human obligation to God’s moral laws. Through his participation in the national purity movement Kellogg voiced his views on many social and moral issues, such as moral and sex education programs, the abolition of prostitution, elimination of venereal disease and the prohibition of alcohol and drugs. Wilson observes that Kellogg “relished bringing “biologic living” to the national stage” as “standard-bearer for the national purity movement.”⁵⁷ It may be said that the journey from “common” and

“simple” remedies to scientifically-oriented preventative practices placed health science in a much more influential and socially strategic position.⁵⁸

At the time, Kellogg’s non-denominational, non-sectarian, humanitarian and philanthropic emphases were perceived very negatively by church leaders. The early twentieth century conflicts that eventually led to his estrangement from the denomination have also contributed to a very inadequate and simplistic recognition of Kellogg’s entrepreneurial flair, passion and multi-faceted contribution. However, a proper consideration of the nature of the triangulated tensions within which Kellogg functioned, and which he substantially resolved, enables his work to emerge in a much more positive light.⁵⁹ It also needs to be acknowledged that from the very beginning of his work Kellogg experienced an ongoing barrage of opposition, namely for being an educated scientist, the most creative person in his time, and in the words of Ellen White her “true friend.”⁶⁰ Could it be that Kellogg’s aim to see his medical institution as being non-denominational, non-sectarian, humanitarian and philanthropic in its nature simply expressed his awareness of social change and of the need for a more societally contextualised pathway by which people might discover a new and happier life? Suffice it is to say that Kellogg’s biologic living certainly exerted a transforming impact on American society and awakened a new sense of socially-focused mission for the Seventh-day Adventist Church.

Conclusion

Discovered, nurtured and supported by James and Ellen White, John Harvey Kellogg MD became a recognised medical authority in America. Understandably, but unfortunately, it is his conflicts and final parting with the church which have attracted the most denominational attention and impacted his legacy. Kellogg was a creative and a rather eccentric individual. His contribution may be evaluated by asking what the Seventh-day Adventist Church would be like today without his contribution to health. The answer is — very different!

In spite of his theological tangents and his frustrated and reactionary responses to church leaders and ministers, Kellogg paved an important

transitional pathway for the Seventh-day Adventist health work in the modern world. By placing it in the domain of health science, he opened a way for a scientifically supported, holistic view of health. His contribution goes hand-in-hand with Ellen White's emphasis on a holistic, spiritually-focused wellbeing grounded in a life-transforming faith relationship with God. This complementary stance provides a place for both the healing of the heart and for those principles of good health which lead to a fulfilling life.

Notes and References

¹ Richard W. Schwarz, *John Harvey Kellogg: Pioneering Reformer* (Hagerstown, MD: Review and Herald, 2006), 231.

² John Skrzypaszek, "John Harvey Kellogg's View of the Godhead" in *Biblical and Theological Studies on the Trinity*, eds. Paul Petersen and Rob McIver (Adelaide, SA: Hindmarsh, 2014), 199.

³ George, Knight, *Ellen White's World: A fascinating look at the times in which she lived* (Hagerstown, MD: Review and Herald, 1998), 109. In the section entitled "Health Concerns" Knight describes the general health conditions that prevailed among the population at that time.

⁴ Gary Land, *The World of Ellen G. White* (Hagerstown, MD: Review and Herald, 1987), 149–150.

⁵ Robert R. Mathisen, "The Encounter between Religion and Science," in *Critical Issues in American Religious History*, ed. Robert R Mathisen (Waco, Texas: Baylor University Press, 2006), 376. Mathisen points out that "The new ideas of science were overturning a traditional understanding about the nature of the universe." In the same collection of essays Turner also explains the nature of the emerging divide. In 1867 Jonathan Harrison, in Illinois, complained that "even atheism" would be "a forward movement." Such a movement of thought was even then gathering momentum, culminating two centuries of struggle between "those who sought to secure belief by fixing it in comprehensible reality and those who denied that God fitted those familiar terms." James C. Turner, "The Intellectual Crisis of Belief", in *Critical Issues in American Religious History*, ed. Mathisen, 414.

⁶ Charles H. Lippy, *Introducing American Religion* (New York, NY: Routledge, 2009), 85–90.

⁷ Knight says that "Even though the early-nineteenth-century health reform movements had achieved some advances, the post-Civil War years were still a time of sanitary, medical, and dietary ignorance. The next six decades, however, would see unprecedented progress in every health-related field." Knight, *Ellen White's World*, 109.

⁸ "Sectional Crisis of Reconstruction" in *A Documentary History of Religion in America*, eds. Edwin S. Gaustad and Mark A. Noll (Grand Rapids, MI: Eerdmans, 2003), 519.

⁹ "The Emancipation Declaration," *General Records of the United States: National Archives & Records Administration, Washington*. Retrieved from http://www.archives.gov/exhibits/featured_documents/emancipation_proclamation/ (25 February, 2015).

¹⁰ *Ibid.*

¹¹ John Skrzypaszek, "The Heart of the Seventh-day Adventist Health Message," *Ministry International Journal for Pastors*, 86:12 (December, 2014): 6–8.

¹² *Ibid.*, 6.

¹³ Ellen G. White, Ms 1, June 6, 1863 (Ellen G. White/Seventh-day Adventist Research Centre at Avondale college of Higher Education).

¹⁴ It is of interest to note that, as pointed out by Hardinge, for Seventh-day Adventists prior to 1863 the "adoption and integration of these (health) reforms was rather slow." Fred Hardinge, "Core Health Teachings of the SDA Church," in *Health 2000 and Beyond*, eds. Stoy Proctor, Eugene Durand and Gary Swanson (Warburton, Victoria: Signs Publishing company, 1994)–Proceedings of the Study Conference on Adventist Theology, Philosophy and Practice of Health and Healing, held at Silver Spring, Maryland, June 18–24, 1993, 103. In the area of dietary practices the early Seventh-day Adventist community reflected the lifestyle of the general population. See, Ronald. L. Numbers, *Prophetess of Health: A Study of Ellen White 2nd ed.* (Grand Rapids, MI: Eerdmans, 1992), 95, 137.

¹⁵ As early as 1857, Ellen White began to address issues relating to the spiritual wellbeing of the believers.

¹⁶ Schwarz, *John Harvey Kellogg*, 27. See also, Patricia S. Jones, "A Christian Paradigm of Personal Wholeness," in *Health 2000 and Beyond*, eds. Proctor, Durand and Swanson, 79–88; Fred Hardinge, "Core Health Teachings of the

SDA Church," in *Health 2000 and Beyond*, eds. Proctor, Durand and Swanson, 103–112.

¹⁷ Skrzypaszek, "The Heart of the Seventh-day Adventist Health Message," 8. Reid observes correctly that "too much emphasis was placed on the uniqueness of her [Ellen White's] message and not enough on her identification of healthful living as an expression of spirituality." George W. Reid, "Out of Darkness, Light: Roots of Adventist Health Reform," in *Health 2000 and Beyond*, eds. Proctor, Durand and Swanson, 91.

¹⁸ Reid, *ibid.*

¹⁹ Schwarz, *John Harvey Kellogg*, 27.

²⁰ Land, *The World of Ellen White*, 150.

²¹ *Ibid.* Other medical systems promoted around that time included the heat treatments of Samuel Thomson. See John Blake, "Health Reform," in *The Rise of Adventism: Religion and Society in Mid-nineteenth Century America*, ed. Edwin S. Gaustad (New York, USA: Harper and Row, 1974), 33, 34.

²² Numbers, *Prophetess of Health 2nd ed.*, 110.

²³ Reid, "Out of Darkness, Light: Roots of Adventist Health Reform," 90.

²⁴ Lippy, *Introducing American Religion*, 87.

²⁵ Reid, "Out of Darkness," 90.

²⁶ Schwarz, *John Harvey Kellogg*, 20.

²⁷ *Ibid.*, 21.

²⁸ *Ibid.*, 27. Also see Numbers, *Prophetess of Health 2nd ed.*, 124–126.

²⁹ Schwarz describes Kellogg's experimental spirit in the following passage. "John decided to be a vegetarian. Previously he had concluded that he was always going to be small of stature, so he now reasoned that the new diet could not hurt him much and might even prove beneficial. He also slept on the floor, with nothing but newspapers for a mattress, during the entire summer to correct a tendency toward round shoulders." Schwarz, *John Harvey Kellogg*, 28.

³⁰ *Ibid.*, 32. See also Floyd Greenleaf and Jerry Moon, "Builder," in *Ellen Harmon White: American Prophet*, eds. Terrie Dopp Ammoldt, Gary Land and Ronald Numbers (New York, NY: Oxford University Press, 2014), 132. Greenleaf and Moon refer to James White's progressive, visionary thinking.

³¹ Schwarz, *John Harvey Kellogg*, 31. Trall's school focused on "the curative powers of the eternal and external uses of water, simple diet, proper exercise and fresh water" and "placed little reliance on drugs of any kind."

³² Numbers, *Prophetess of Health 2nd ed.*, 95.

³³ Herbert E. Douglass, *Messenger of the Lord: The Prophetic Ministry of Ellen White* (Nampa, ID: Pacific Press, 1998), 279. See also Numbers, *Prophetess of Health 2nd ed.*, 95–96 for a description of the prevailing lifestyle conditions in the nineteenth century – America as a "sick and dirty nation."

³⁴ "Medicine in 1860s Victoria: 19th Century Medicine". Retrieved from <http://web.uvic.ca/vv/student/medicine/medicine19c.htm> (4 March, 2015) "Many medical practitioners still subscribed (at least in some form) to the ancient theory of the 'four humors' developed by the Roman physician Galen (131–199 AD). According to this theory, the body is made up of four humors — blood, phlegm, black bile, and yellow bile. The relative amounts of each humor in the body determined state of health and temperament (a person with more blood was 'sanguine'; with more phlegm 'phlegmatic'; with black bile 'melancholic'; and if yellow bile predominated, 'choleric' or 'bilious'). Too much or too little of any humor was said to cause illness, which could be cured by restoring the balance. Many nineteenth-century medicines and practices were intended to do this."

³⁵ Numbers, *Prophetess of Health*, 113.

³⁶ John H. Gohde, "How Natural Healing Developed in America." Retrieved from <http://naturalhealthperspective.com/tutorials/healing-in-america.html> (26 February, 2015).

³⁷ Brian C. Wilson, *Dr. John Harvey Kellogg and the Religion of Biologic Living* (Bloomington, Indiana: Indiana University Press, 2014), 44.

³⁸ Bert Hansen, "Medical Advances in Nineteenth Century America." Retrieved from <http://www.gilderlehrman.org/history-by-era/first-age-reform/essays/medical-advances-nineteenth-century-america> (3 March, 2015).

³⁹ *Ibid.*, 35.

⁴⁰ Wilson, *Dr. John Harvey Kellogg and the Religion of Biologic Living*, 44.

⁴¹ On the similarity between Ellen White's and the health reformers' views, see John N. Loughborough, *Rise and Progress of the Seventh-day Adventists* (Battle Creek, MI: General Conference Association, 1892), 274–275.

⁴² Kellogg defended his stand on vegetarianism using both medical and biblical arguments—see Schwarz, *John Harvey Kellogg*, 41.

⁴³ John H. Kellogg, M.D., *Harmony of Science and the Bible on the Nature of Soul and the Doctrine of Resurrection* (Battle Creek, MI: Review and Herald, 1879), 29.

⁴⁴ *Ibid.*

⁴⁵ *Ibid.*, 27, 28.

⁴⁶ Wilson, *Dr. John Harvey Kellogg and the Religion of Biologic Living*, 49.

⁴⁷ John Harvey Kellogg, "The Simple Life in a Nutshell (Biologic Living)." Retrieved from <http://www.lifestylelaboratory.com/articles/simple-life-nutshell.html> (2 March, 2015).

⁴⁸ *Ibid.*

⁴⁹ Malcolm Bull and Keith Lockhart, *Seeking a Sanctuary: Seventh-day Adventism and the American Dream* (Bloomington, IN: Indiana University Press, 2007), 303. The basic tenets of Kellogg's biologic living are: a) Obedience to the laws of life and health is a moral obligation; b) Mental, moral and physical health can only be maintained by the observance of mental, moral and physical laws; c) A healthy body is essential to the soundness of mind; d) Physical health promotes morality; e) Morality, likewise, promotes physical health; f) In the treatment of disease the simplest and fastest remedies are the proper curative agents; g) Nature is the most efficient physician. Wilson, *Dr. John Harvey Kellogg and the Religion of Biologic Living*, 44.

⁵⁰ *Ibid.*, 302.

⁵¹ The challenge of ensuring that the church relates meaningfully to the health culture of its age may be said to reflect similar, but much wider relevance issues faced by each succeeding Christian age. See H. Richard Niebuhr, *Christ and Culture* (New York, USA: Harper and Row, 1951).

⁵² Ellen G. White, *Ministry of Healing* (Mountain View, CA: Pacific Press, 1905), 25.

⁵³ For a brief discussion of the administrative tensions between the church organization and Kellogg and the also of the theological stresses due to his drift towards pantheism see Richard R. Schwarz and Floyd Greenleaf, *Light Bearers: A History of the Seventh-day Adventist Church* (Nampa, Idaho: Pacific Press Publishing Association, 1995), 264–272; Gilbert M. Valentine, *The Shaping of Adventism* (Berrien Springs, Michigan: Andrews University Press, 1992), Ch 11.

⁵⁴ Wilson, *Dr. John Harvey Kellogg and the Religion of Biologic Living*, 56.

⁵⁵ George I. Butler to Kellogg, March 7, 1906 (John Harvey Kellogg Manuscript Collection 13, Box 3, File 8, Ellen G. White/Seventh-day Adventist Research Centre at Avondale college of Higher Education). Also, see Wilson, *Dr. John Harvey Kellogg and the Religion of Biologic Living*, 57.

⁵⁶ Schwarz, *John Harvey Kellogg*, 56.

⁵⁷ Wilson, *Dr. John Harvey Kellogg and the Religion of Biologic Living*, 55.

⁵⁸ *Ibid.*, 231.

⁵⁹ Bull and Lockhart, *Seeking a Sanctuary: Seventh-day Adventism and the American Dream*, 303.

⁶⁰ Ellen G. White, Lt 3, 1899 (Ellen G. White/Seventh-day Adventist Research Centre at Avondale college of Higher Education).