

A Manifesto for Lifestyle Medicine

a prerequisite for fundamental change in health care and costs

March 2018



**LIFESTYLE
4HEALTH**

Dutch Innovation Center
for Lifestyle Medicine

The fact that lifestyle interventions can be used to prevent health problems is clear. Lifestyle – comprising nutrition, exercise, relaxation and sleep – is vital to good health and to staying healthy. The fact that lifestyle interventions can also be effectively used to speed recuperation from illness and to treat disease is less well known, even though reliable evidence for this has long existed. The authors of this Manifesto argue that lifestyle medicine is needed to achieve a fundamental change in health care provision and health care costs.

On 4 April the Dutch Lower House met with Minister Bruins to discuss developments in lifestyle interventions in curative health care – and there have certainly been some developments. The knowledge synthesis commissioned by ZonMw [the Netherlands Organisation for Health Research and Development] has shown that ‘lifestyle as medicine’ can be used to recuperate from illness or to prevent the worsening of complaints¹. Existing and new research results of lifestyle interventions and programmes have all demonstrated the reversibility of diabetes mellitus type 2 (DM2)². This is not only a spectacular finding; it also offers the prospect of substantial medical and financial benefits. The commendable initiative of *Keer Diabetes2 Om* [‘Turn Diabetes2 Around’] by *Voeding Leeft* [‘Food is Alive’] – supported by several bodies including the [healthcare insurers] VGZ – has also shown these results, and deserves to be followed up, because lifestyle therapy offers unprecedentedly large potential benefits both in medical and in financial and economic terms. However, current developments have also exposed a basic gap in our medical research. If we want to bring about a real change in health care and health care costs, then lifestyle medicine needs to be given proper standing in the Dutch standard health

1 <https://www.zonmw.nl/nl/actueel/nieuws/detail/item/chronische-ziekten-behandelen-met-voeding/>

2 <https://www.frontiersin.org/articles/10.3389/fendo.2017.00381/full>

3 https://zelfzorgondersteund.nl/wp-content/uploads/2017/12/Rapportage-NDC-Resultaten_T2DM-2017.pdf

insurance package and in its research programmes. As things are, the market is hardly reacting at all to this huge potential. In the interests of patients and health insurance premium payers, the power of the VWS [Health, Welfare and Sport] ministers and parliament to actualize this potential is greatly to be desired.

The *Keer Diabetes2 Om* results are clearly sensational. Almost 90% of the project participants are now either partly or entirely medication-free, and/or have healthier blood sugar levels. Almost 40% were still entirely medication-free after a year. A substantial number of patients have been able to dispense with insulin altogether. DM2 has no modern medical cure, but with the right lifestyle measures the overwhelming majority of patients can reduce their medication levels or stop taking drugs altogether. The potential benefits offered by lifestyle-related therapy for people with DM2 has also been demonstrated by the National Diabetes Challenge³ programmes and *Herstelcirkel in de Wijk*⁴ [‘Neighbourhood Recovery Circle’]. The Cool programme has also demonstrated the potential benefits of lifestyle coaching for people with obesity and overweight-related complaints⁵.

The potential financial and economic benefits of these lifestyle programmes for DM2 can hardly be overestimated. DM2 is an extremely expensive illness; not just because of the cost of medication and consultancy, but especially because the illness has a high co-morbidity: that is to say, because DM2 patients die appreciably more often from the consequences of depression, cardiovascular disease,

4 https://docs.wixstatic.com/ugd/21d347_ffe492b31932413c837d507db0d75a3a.pdf

5 www.researchgate.net/publication/324330512_Coaching_op_Leefstijl_Cool_Eindrapport_van_een_implementatie_en_monitoring_studie



various forms of cancer^{6 7 8}, amputations, kidney disease and Alzheimer's/dementia. Now that it has been recognized that DM2 is often largely reversible, an entire chain reaction of medical and economic suffering can be avoided. Estimates of the financial benefits have varied widely, but all show enormous savings^{9 10 11}. TNO has shown that €2.7 billion could be saved over five years in medical costs alone if 40% of those with DM2 reverse their disease¹², and this estimate did not even include the cost savings that would be achieved through reduced sickness absence and employment disability.

Another relevant and fundamental aspect of these lifestyle programmes is that they have proved that lifestyle medicine also has curative effects. Until recently lifestyle medicine was almost only ever implemented as part of preventative health care: doctors advised us not to smoke, to take regular exercise, and to watch our weight, even though pioneers have known about its curative effect for decades and serious indications for these effects have long existed.

An interesting question is why this knowledge is only now being scientifically confirmed and recognized. This is the answer: as a society we have made the choice – with very few exceptions – to privatize clinical and therapeutic medical research almost entirely, and to leave it to the market. The outcomes of this kind of research form the foundations of medical treatment protocols, and these in turn form the basis of the range of treatments that doctors can offer their patients. Clinical and therapeutic medical research is also an important source of material for medical education and training. The fact that we have left this

6 <https://www.diabetes.org.uk/diabetes-the-basics/related-conditions/diabetes-and-cancer>

7 <https://www.webmd.com/diabetes/news/20100616/why-does-diabetes-increase-cancer-risk>

8 http://onlinelibrary.wiley.com/doi/10.14442/jgfm.16.3_170/pd

9 <https://www.medischcontact.nl/nieuws/laatste-nieuws/artikel/diabeteskosten-tien-miljard-per-jaar.htm>

research to the market has led to a 'market optimum': private parties can earn money with exploitable forms of treatment. This is usually in the form of a patentable molecule, which is then called a medicine or drug. Treatment protocols generally contain these kinds of medicine, and the study of health and illness is even often called 'medicine'. The fact that this is how the system works cannot be blamed on the pharmaceutical industry. On the contrary, this industry – which is almost entirely listed on the stock exchange – is required to strive for maximum profitability under the permanent and heavy burden of financial markets (often dominated by our own pension or investment funds).

Today's primary pharmaceutical system worked well when the principal burden of illness was the result of infectious diseases: tuberculosis, whooping cough, STDs and the like. This system is still the best for emergency medicine and oncology. However, today over 50% of adults¹³ suffer from a chronic disorder that is directly or indirectly the result of lack of exercise, chronic overweight, poor nutrition, drink or drugs, lack of sleep, and chronic stress. For lifestyle-related illnesses, the potential benefits offered by lifestyle medicine are generally much greater than those offered by pills or powders. At the very least they deserve to be included in treatment protocols as 'first-choice interventions', and acted upon before any medication is employed. Moreover, lifestyle therapy remains an important treatment given alongside any medication, once indicated.

Nevertheless, lifestyle medicine is failing to adequately penetrate treatment protocols and medical school curricula, because too little medical

10 <https://www.volksgezondheidszorg.info/onderwerp/diabetes-mellitus/kosten/kosten#node-kosten-van-zorg-voor-diabetes-mellitus>

11 <https://www.nu.nl/gezondheid/2667711/diabetes-kost-miljarden-per-jaar.html>

12

https://www.tno.nl/media/8822/presentatie_leefstijl_als_medicijn.pdf

13 <https://www.cdc.gov/chronicdisease/overview/index.htm>



research is being done into it. In our view this is a classic instance of market failure – and a very expensive one, because the little available clinical medical research that is being done into the effect of lifestyle interventions offers the prospect of enormous therapeutic and financial benefits. There are adequate (if provisionally cautious) indications that lifestyle can make important contributions to the reduction and even remission of complaints across a broad spectrum of (sometimes very expensive) ailments, including intestinal disease, cardiovascular disease and asthma; that ‘running therapy’ can also help in anxiety disorders; and that specific diets can help in Crohn’s disease^{14 15}. The same applies to the relationship between abdominal fat and asthma¹⁶, between fast foods and depression^{17 18 19 20 21}, and between meaning, movement and dementia²². It has also been shown that nutrition and stress-coping strongly determine the quality of the gut microbiome and that this, in turn, has an effect on e.g. Parkinson’s disease²³; and that interventions such as probiotics can positively influence psychiatric disorders²⁴. Finally, people suffering from chronic inflammation (rheumatism, eczema, psoriasis) may also benefit from meditation^{25 26}.

Many doctors and scientists are eager to carefully examine, consolidate, and confirm the potential benefits of lifestyle medicine in clinical studies. However, funding for this kind of research cannot be found in the open market. The current system actually makes this quite logical, because such treatments as nutritional advice, walking, running, and the

importance of meaning and purpose in life cannot be patented. This means that promising studies into the effects of lifestyle interventions are seldom confirmed or followed up by later studies, and end up collecting dust on university shelves for decades. The market is basically uninterested, and for this reason the therapeutic potential of lifestyle intervention is recognized and employed either late or not at all.

We see in lifestyle medicine a fundamental area of improvement in our health care system, from the perspective of its medical benefits and the benefits to perceived health, and we see in this a strong incentive to bring about the financial frameworks of the Outline Agreement. However, a number of different conditions affect the ability to achieve this potential. To start with, laudable initiatives such as those from the National Diabetes Challenge, from *Keer Diabetes2 Om* (VGZ), from *Herstelcirkel in de Wijk* (Menzis) and from the Cool programme (CZ) will need to be followed up so that lifestyle medicine becomes structurally anchored in basic health care provision and further developed within that framework. Secondly, lifestyle medicine will need to be given more attention in the curricula of a variety of health care professional training institutions. Thirdly, there will need to be more billing categories [*betaaltitels*] for lifestyle interventions. Lastly, lifestyle medicine needs to be given an overarching collective agenda by government, the business community, and knowledge institutes working for innovation, education, and actualization.

14 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1714497/>

15 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4285926/>

16 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3966106/>

17 <https://doi.org/10.1017/S1368980011001856>

18

<https://www.sciencedirect.com/science/article/pii/S0165178117301981>

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19 <https://bmcmedicine.biomedcentral.com/articles/10.1186/1741-7015-11-3>

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20 <https://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-015-0461-x>

015-0461-x

21 <http://www.apa.org/monitor/2017/09/food-mental-health.aspx>

22 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3389510/>

23 [https://www.cell.com/cell/fulltext/S0092-8674\(16\)31590-2](https://www.cell.com/cell/fulltext/S0092-8674(16)31590-2)

24 <https://www.ncbi.nlm.nih.gov/pubmed/29190117>

25

<https://www.frontiersin.org/articles/10.3389/fimmu.2017.00670/full>

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<https://www.sciencedirect.com/science/article/pii/S0889159112004758?via%3Dihub>

8?via%3Dihub



The current government's Coalition Agreement includes a somewhat parenthetical reference to lifestyle medicine: 'We will promote the inclusion of certain proven lifestyle interventions [...] in medical training courses and guidelines. There where knowledge of their effectiveness is lacking, we will do additional research.' This sounds encouraging, but we need more than warm words. Achieving the full potential benefits of lifestyle medicine will require political will and leadership. We invite the government, and in particular the Ministers of Health, Welfare and Sport, to commit themselves wholeheartedly to lifestyle medicine.

