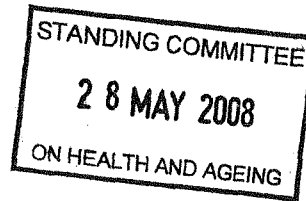


Submission No. 55  
(Inq into Obesity)

*12 30/05/08*



25 May 2008

Jill Hall M.P.  
Member for Shortland  
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**Re: Request for a meeting with the House Health Committee about primary health care education and combined population health, lifestyle and environment improvement.**

Dear Ms Hill,

Thank you for the opportunity to arrange a meeting with the House Health Committee about primary care education, population health, lifestyle and environment improvement.

As discussed previously we have made significant progress in the last 15 months without government support to date and believe a long term self sustainable system focusing on primary care education, health professional coordination, health promotion, chronic disease management and healthcare cost reduction in the community is achievable under existing and future Medicare, Private Health Insurance and private paying models.

We desire a meeting with the Office of the Minister for Health and Ageing to discuss our plans, requirements and benefits to the governments growing healthcare and environment crisis, we believe our plans align and mutually support the governments current policy areas.

I have attached to this letter a detailed overview of the Lifestyle Medicine approach.

Professor Garry Egger, Dr Andrew Binns and I would be available to meet with the House Health Committee at their earliest convenience.

Yours sincerely

A handwritten signature in black ink, appearing to read "Troy Grogan".

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**The following is a two part submission describing the potential prevention and management of Australia's leading causes of disease through integrated and interdisciplinary clinical education, training, and wider policy development directed towards lifestyle, behavioural and environmental structural change.**

*Part 1*

**The emergence of a clinical process: 'Lifestyle medicine' as a structured approach to the management of chronic disease.**

*Part 2*

**Does obesity really matter in the development of chronic disease? Or do we need an environmental makeover to combat the inflammatory and chronic disease epidemics?**

**Contributing Authors**

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## Abstract

*With chronic diseases increasing, and no notable preventative initiatives on the horizon, a new way of managing these at the clinical and policy level is called for.*

- Chronic diseases are continuing to increase in prevalence world-wide;
- Public health approaches to this require clinical support;
- ‘Lifestyle medicine’ represents a structured approach to this;
- This involves a greater understanding of environmental, behavioural and motivational factors in disease aetiology, and greater patient involvement in care;
- The Australian Lifestyle Medicine Association Inc, and post-graduate programs now exist to cater for the demand in this developing field.

There is a link between obesity and chronic disease. However the causal relationship is complicated. Some forms of obesity are associated with low-level systemic inflammation, which is linked to disease. But lifestyle behaviours that may not necessarily cause obesity (poor diet, inadequate sleep, smoking, inactivity etc.) can also cause inflammation and consequent disease. It is proposed that it is the environment driving modern lifestyles, which is the true cause of much chronic disease, rather than obesity *per se*, and that obesity may be one marker of, rather than the primary cause of the problem. Attempts to clinically manage obesity are therefore unlikely to be successful. A more policy-based approach, which attacks the common causes of both biological and ecological ‘dis-ease’, could have positive effects on both chronic disease and environmental problems. A plea is thus made for a greater health input into discussions on environmental regulation for chronic disease control, as well as climate change. The rise of climate change on the political agenda offers a unique opportunity for a ‘stealth intervention’<sup>1</sup> to manage both chronic disease and climate change. Recommendations to reduce greenhouse gas emissions, provide the opportunity to not only effect climate change and non-renewable fuel usage, but to modify the food and activity environments in favour of a more healthy energy balance for the reduction of population levels of obesity, and improvements in human health.

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<sup>1</sup> According to Robinson, a ‘stealth intervention’ for obesity is one done for another purpose but has a side effect of more physical activity and/or less energy intake.

## Introduction

Around 70% of all visits to primary care in developed countries now have a lifestyle-based (and hence preventive) aetiology.<sup>2</sup> Governments of all persuasions have largely chosen to ignore the funding of real preventive action. Hence, while not giving up on Rose's<sup>3</sup> epidemiological dictum that "small changes in large populations are likely to be more effective than large changes in small numbers", it is evident that a new way of managing chronic diseases is called for. This needs to bridge the gap between health promotion, with its preventive and population orientation, and clinical practice, with its directive and patient-centred scope. The advent of a modified clinical discipline, based around the concept of 'lifestyle medicine', may help to do this.

### What is Lifestyle Medicine?

We have previously defined lifestyle medicine as: '*the application of environmental, behavioural, medical and motivation principles to the management of lifestyle-related health problems in a clinical setting.*'<sup>4</sup> It involves the therapeutic use of lifestyle interventions in the management of (predominantly chronic) disease at all levels.

Obesity is collateral damage in the battle for modernity. It's the burden many of us bear as a result of our inability, or unwillingness, to adjust to the energy surpluses emanating from economic advancement. A causal association between obesity and several diseases has been well documented.<sup>5</sup> However, recent findings suggest a more complicated aetiological role than just a simple weight-disease association.<sup>6</sup> Dependent largely on the site of fat storage, obesity can be relatively benign, with little negative impact on health,<sup>7</sup> or metabolic disease, with significant links to cardio-metabolic disorders.<sup>8</sup> On the other hand, a clear link has been established between certain lifestyle factors (aspects of nutrition, inactivity, inadequate sleep, stress, depression, excessive alcohol intake, smoking), which sometimes, but not always, lead to obesity, and a type of low-grade systemic inflammation,<sup>9</sup> which is associated with a range of chronic diseases.<sup>9, 10</sup>

It is proposed here that obvious, or subcutaneous obesity may be simply a marker of an aberrant human lifestyle, which is mediated by aspects of the modern technological environment, to which humans have had little time to adapt. As a result, a low-level immune reaction, resulting in a cascade of potentially pathological events, occurs not just in association with metabolic forms of obesity, but to these lifestyle behaviours, with or without obesity. If correct, this implies the need for an altered approach to the management of chronic disease, with a greater emphasis on regulation and policy change to influence lifestyle and the environment, than on personal changes, such as diets and exercise routines, which can be overwhelmed by the modern 'obesogenic'<sup>11</sup> environment.

Because of the synergies in factors causing obesity and environmental damage,<sup>12, 13</sup> policies to do this may have the dual effect of moderating obesity and environmental problems such as climate change.

The obesity-disease relationship is complex and obesity *per se*, may not provide a satisfactory causal explanation for many of the chronic diseases for which it has often been blamed. Secondly, inflammatory processes, which are now regarded as a potent indicator of cardio-metabolic disease risk, are linked with individual lifestyle behaviours that often, but not always, cause weight gain. This implies that the modern environment driving lifestyle behaviours, is the distal cause, not only of obesity, but of much modern chronic disease, and that this needs to be acknowledged and dealt with, in any comprehensive disease management program. Ways of mitigating the adverse biological, as well as ecological effects of the modern environment, which do not discount the significant gains made from economic development, with particular attention to the management of obesity and climate change through personal carbon trading, first mooted by Aubrey Myer of the Global Commons Institute in the UK in 1996<sup>14</sup>, and expanded upon by others<sup>15,16,17</sup> which stimulated interest in the development of a simple, workable, regulated financial incentive system that provides equity as well as efficiency in reducing energy use and greenhouse gas emissions may form a serendipitous effect in the modification of the existing obesogenic environment, through encouraging greater use of personal energy in favour of non-renewable energy sources. Combined with industry carbon trading this might also be expected to reduce demand, and hence production of high energy-dense foods (due to increased cost relative to non-processed foods). The outcome could be not just related to climate change, but to attitudes to consumption, and

ultimately, to improvements in human health. This extends a previous review of the underlying common link between biological and ecological concerns.<sup>18</sup>

### **Processes in Lifestyle medicine**

A lifestyle medicine approach to chronic disease attempts to manage, and ultimately reduce chronic disease by concentrating on cause, rather than effect. In doing so, there are differences in orientation to the conventional approach. In particular there is a greater requirement for the patient to be an active partner in care and, because of the (often behavioural and emotional) 'cost' and commitment required to do this, a greater need for an understanding of motivational principles, and utilisation of the expertise of other disciplines by the co-ordinating clinician. Ironically, there is little in the medical literature, or at medical conferences, to assist in understanding practical approaches to motivating patients. Funded research programs are still heavily weighted in favour of pharmacological solutions. Motivational interviewing<sup>11</sup> is a relatively rare example.

Medication, under the lifestyle medicine paradigm is also seen more as an adjunct, rather than an 'end treatment' in care, with side-effects recognised as part of the outcome. Erectile dysfunction from anti-depressant medication in a middle age male for example, can potentially exacerbate the problem. Hence this should be weighed against the possibility of a lifestyle-change option such as exercise, for which a strong evidence base in managing depression exists.<sup>19</sup>

It is also apparent that many of the lifestyle behaviours causing chronic disease are closely linked in vicious cycles, and that an underlying cause may be the low-grade systemic inflammation now occupying much research interest as previously mentioned.<sup>9</sup> Inadequate sleep for example can lead to fatigue; fatigue to inactivity; inactivity to poor, or over-nutrition, and all these can exacerbate obesity and depression, leading to the metabolic syndrome, type 2 diabetes, sex and mood problems, and possibly heart disease. Medication can help manage this but, as seen above, may also cause counter-productive side-effects such as weight gain, exercise induced myopathy,<sup>20</sup> and sexual dysfunction. All of this – the predisposing factors, cause, disease and treatment – make up the practice of lifestyle medicine, which, in a rationally balanced political health world, would be supported in hand-to-hand combat by the artillery of an effective public health barrage.

Exercise and nutrition are the 'penicillin' of lifestyle medicine; psychology the 'syringe' through which these are delivered, currently in conjunction with specialists in each area. In contrast to population and environmental interventions, lifestyle medicine focuses on individuals (and in some cases small groups), where interventions are typically administered in a primary care setting. Just as in any specialised area, there is a body of knowledge and skills that need to be mastered, all of which are unlikely to exist in one individual. The involvement of different disciplines ensures a greater availability of these skills within a practicing team.

The ambit of lifestyle includes include obesity, sleep, mood states (anxiety, depression), addictions, skin care, sexual behaviour, oral and auditory health, pain management, iatrogenesis, and many types of injury. Typically, each of these requires the input of a specialist discipline (dietitian, exercise physiologist, psychologist etc). However, a new generation of lifestyle medicine exponents emanating from vocational programs now being offered at several Universities is likely to offer a combination of expertise in different areas including exercise, nutrition and psychology. Such non-medical 'specialties' are expected to facilitate the need for greater time and motivational involvement required by clinicians who are hard pushed for time to do this.

The advent of the Enhanced Primary Care (EPC) system within the Australian health care system<sup>21</sup> allows a wider canvas, embracing as it does the 13 allied health disciplines, as well as GPs, eligible for Medicare benefits in managing chronic disease. While not without its difficulties,<sup>22</sup> and still in need of greater streamlining and full evaluation, the EPC system is evolving into an effective means of dealing with chronic diseases which do not easily remit under conventional pharmaco-medical management, and which have largely arisen as collateral damage in the battle for economic well-being.<sup>13</sup> Examining the reasons for this, makes the need for an altered approach seem even more obvious.

### **Future Developments**

A non-profit Australian Lifestyle Medicine Association (ALMA), with a charter to service all disciplines accredited under the EPC system was inaugurated in May 2008. Concurrently a set of on-line Lifestyle Medicine 'tools', free to practitioners and patients are being developed creating an evidence based and interactive online resource to mutually support the delivery of Lifestyle Medicine education providing quality tools for GP's and health professionals to help assess, guide and provide lifestyle based behavioural and motivational intervention to reduce the health risk factors identified during clinical assessment.

### **Basis for Development of the Unique Online Resource**

- There are ~130,000 Primary Care Practitioners in Australia
- 5,000 GP's have been through the first module of the Lifestyle Medicine education to date
- 94% of General Practices have computers<sup>23</sup>
- Currently ~15,000 GP's use the internet in their practice<sup>23</sup>
- Currently ~13,000 GP's are prepared to recommend health websites to their patients<sup>24</sup>
- Currently 11.7 million Australian's may be referred to a health website by their GP

([www.lifestylmedicine.net.au](http://www.lifestylmedicine.net.au)), is evolving to incorporate the rapidly developing changes in the field. Several medical schools, and public health programs, are also looking to incorporate aspects of the discipline at the under-graduate or post-graduate levels. Hence while lifestyle-related chronic disease prevalence appears unlikely to be decreased in the near future, the prospects for a discipline of lifestyle medicine indeed appear healthy.

### **Conclusion**

Increasing evidence suggests that while obesity is a health risk, it may not be the direct cause, but may instead be a marker of many modern chronic diseases. The distal cause appears to lie in a maladaptive environment facilitating lifestyle behaviours and stimuli to which humans have not had time to adjust, leading us to 'treat our own cells like invading microbes'.<sup>25</sup> Modifying the modern environment, while not losing the benefits of modern development, thus becomes a key health priority. As there is a common cause between several forms of chronic disease, as indicated by obesity, and climate change, major inter-disciplinary initiatives like carbon-trading, which have the potential to reduce both biological and ecological disorder, should be considered as part of future health planning. For this to happen, it is vital that health specialists are both aware of the significance of, and provide input to, the planning and initiation of developing carbon trading systems.

Support is being sought for;

- Establishment of the Australian Lifestyle Medicine Association
- Online interactive resource by [www.lifestylmedicine.net.au](http://www.lifestylmedicine.net.au) linking health professionals, their patients and the general public
- Health Professional involvement in the climate change agenda
- Research into economic, health and environmental impact of Lifestyle Medicine in Australia

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