

Why The Gyms & Leisure Centres are Safe

Dear MP

My name is Adam Jess, I am writing to ask you why the gyms are closed, the gyms have been demonised since the start of this pandemic. There is a rise in suicide, an increase in drug overdoses, increased poverty, increase in individuals being harmed, increase in alcohol consumption and an increase in obesity and heart disease. All stated above can be improved with help from leisure staff and exercise. The Welsh government released their evidence on why gyms and leisure centres are unsafe but their evidence was based on Korea before health & safety measures were in place. Gyms have followed all guidelines set out by the government as well as re-designing their normal operating procedures and emergency action plans to make it safe. Below I will give you the evidence why gyms are the solution, not the problem.

An article written by [William Dietz et al \(2020\)](#) from the *Journal of the American Medical Association*: discussed obesity and how it affects those who are overweight. Those who fall into the overweight category are at a high risk due to excess weight causing a reduced function of the Respiratory & Cardiovascular system. The Respiratory system becomes less compliant decreasing overall oxygen intake, this affects all bodily systems due to the lack of oxygen being present. Those with abdominal obesity will have "compromised pulmonary function" as the diaphragm becomes weak, lacking the strength to contract and relax making it harder to breathe.

[Meera Senthilingam](#) from The British Medical Journal (2021) has stated "obesity is a risk factor for severe covid-19 disease and death". Since the pandemic began the fitness industry has been ignored by the government taking away the resources to combat the issue. Studies from the USA have shown that having a "BMI of over 30 increased being admitted to hospital by 113%, admitted to intensive care by 74% and dying by up to 48%". Public Health England have reported similar figures, those with a BMI over 40 have an increased risk of death by 90%.

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[Barry M. Popkin et al. \(2020\)](#) from *The Obesity Review of The World Obesity Federation* discussed that obesity is still on the rise and how being overweight/obese is dangerous during a pandemic. Data from studies Popkin analysed showed that patients who are hospitalised with covid-19 "were more likely to have unfavourable outcomes with a 48% increase in death". Obese individuals are at a high risk due to underlying health conditions, these include: "hypertension, dyslipidaemia, type 2 diabetes, chronic kidney or liver disease". Being obese or overweight puts you at risk of other impairments & diseases such as "influenza, hepatitis and nosocomial infections such as tuberculosis, community-acquired pneumonia, sepsis and others".

To combat the after affect of covid, [Dr Aessa Mahmud Tumi et al. \(2020\)](#) from the British Journal of Sports Medicine put together a "Return To Exercise Model For The Non-Athlete" that consisted of 4 stages: Stage 1 - Rest from exercise, Stage 2 - Graduated return to function, Stage 3 - Graduated return to exercise, Stage 4 - Health promotion and patient centred goals. The Return To Exercise Model is similar to the [National Academy of Sports Medicine Optimum Training model](#). The O.P.T model consists of 5 stages working on gradually taking the individual through every aspect with gradual progression and progressive overload, the 5 stages include: Phase 1 Stabilization Endurance Training, Phase 2 Strength Endurance Training, Phase 3 Muscular Development, Phase 4 Maximal Strength Training and Phase 5 Power Training.

When being re-introduced to training the individual should be treated like a beginner even if they previously could run marathons and lift over 2x their own bodyweight. This is due to the reduced function of the Cardiovascular system & Respiratory system causing fatigue to build up quickly. To mitigate fatigue it is recommended to focus on bodyweight exercises for 3-4 weeks at a low intensity before introducing weights.

The death toll on the 8th of March 2021 in the UK stands at 124,000+, majority of these deaths were avoidable if the gyms stayed open and the science were not

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ignored. The pros outweigh the cons as exercise has many benefits and enhances the immune system.

A BBC news article by [Laura Scott 10/02/2021](#), discusses how a virus can decline over time, a study used a cricket glove, a piece of gym pit foam, horse saddle, red and white cricket balls, a rugby ball, a tennis ball and a piece of stainless steel.

The study tested if the virus declines after 1 minute , 15 minutes and 90 minutes. The virus has dropped from 0.074% to 0.003% after 90 minutes.

The Immune System

An article by [Dr. David C. Nieman \(1997\)](#), Moderate Exercise Boosts The Immune System: Those who exercise report fewer colds than sedentary individuals, increased mental stress can result in increased respiratory tract infection. Eat a balanced diet with vitamins and minerals, Vitamin C can reduce oxidative damage to immune cells. Avoid overtraining and chronic fatigue, obtain adequate sleep, sleep disruption has been linked to suppressed immunity. Avoid rapid weight loss, rapid weight loss has been linked to negative immune changes.

[Bente Klarlund Pedersen. et al \(2000\)](#), Exercise And the Immune System: Regulation, Integration And Adaptation: discussed the physiology and how exercise has important modulatory effects on immunocyte dynamics and possibly on immune function. These effects are mediated by diverse factors including exercise induced release of proinflammatory cytokines, classical stress hormones, and hemodynamic effects to cell redistribution.

[Richard J. Simpson \(2020\)](#), Can Exercise Affect Immune Function To Increase Susceptibility To Infection?: There is a consensus among investigators that exercise induced immune changes reflect the physiological and metabolic stress experienced by the individual. Several lines of evidence across human & animal studies support the paradigm that illness risk may be elevated during periods of unusually heavy exertion, especially when other stressors are present. Factors include mental depression or

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anxiety, international travel across several time zones, participation in competitive events, lack of sleep, temperature extremes, low dietary energy intake & nutritional deficiencies.

A study carried out by [Europe Active \(2020\)](#) analysed "14 countries: Belgium, Czech Republic, Denmark, France, Germany, Luxembourg, Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland and the United Kingdom". The study carried out in mainland Europe & the UK had "4,360 fitness clubs and leisure centres tested with a total of 115,384,737 visits recorded in the broad open period of operations from 4th May to 25th October (week #19 to week #43 of 2020). This sample represents 6.8% of the total number of fitness clubs and leisure centres across Europe (63,644 centres - EuropeActive, Deloitte, 2020)".

A total of **115,384,737 visits** to fitness clubs and leisure centres from 25 weeks (from week 19 to week 43) are showing a rate of positive reported COVID-19 cases of **1.12/100,000 visits** (coming from **1,092 reported cases by members** and **196 reported cases by staff**).

Please type into google scholar obesity and covid-19 there are countless research papers giving evidence to why obesity is the leading cause of covid, countries with more than a 40% obesity rate have the highest death rates.

Regards

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