

FIT BODIES, FIT ECONOMIES

The economic benefits of a more physically active world

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Shared value and insurance

We are at a unique moment in history. We live in a world where the interests of business should align with those of its customers, or otherwise run the risk of being found wanting by society.

An example of a business model that has a compelling proposition for society is Vitality. Traditionally, the insurance industry has largely focused on death and disease. In contrast, Vitality focuses on health and quality of life. At Vitality, we understand that when our clients stay healthy, our business and our society also stay healthy. We have pioneered Shared-value Insurance, a proven way to incentivise our clients to become healthier – in terms of what they eat, how they move and even how they sleep. Through this behaviour change platform we have helped members exercise on average 4.8 days more a month. Improvements in health outcomes like this are achieved by incentivising clients in 22 markets with over six million rewards each month. Our Vitality platform is linked to the world's leading insurance companies, who represent a third of the global personal protection population.

Driving the debate on activity and making a powerful commitment

Underpinning Vitality is a tremendous amount of research on the links between incentives and behaviour change, behaviour change and risk reduction, risk reduction and economic impact. Exercise is a key behaviour in this context. We know exercise is good for us, but I suspect that most people don't realise just how true this is.

This year, we have released a global study on the economic impact of exercise. It shows that if the world were more physically active, the global economy would benefit through related improvements in lower mortality rates and increasing productivity levels. This is another reason why we, as the global network of insurers using Vitality, have committed to making **100 million people 20% more active by 2025**.

We invite you to join us and become part of a global health movement.

drian Gore

Group Chief Executive, Discovery

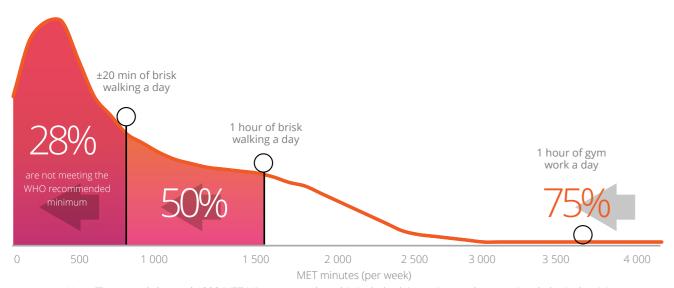
The global state of inactivity

The **World Health Organization** (WHO) recognises physical inactivity as the fourth leading risk factor for premature death (+/- 5 million related deaths each year) with physically inactive people having a 30% higher risk of premature death due to chronic diseases of lifestyle, such as high blood pressure and coronary heart disease, certain cancers, stroke and Type 2 diabetes as well as dementia and symptoms of depression and anxiety.

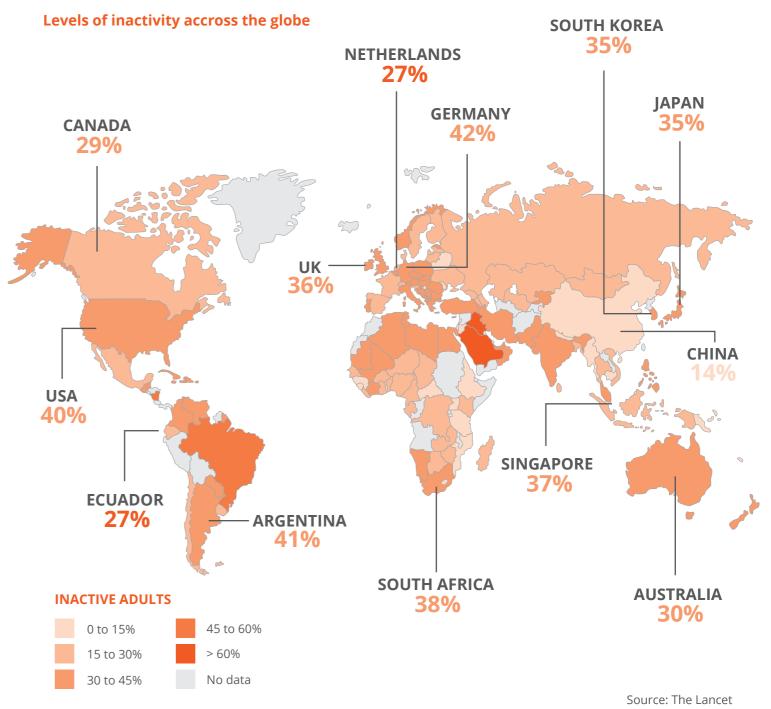
280/0/11 of the global population are inactive

more in the developed world

World population distribution by levels of physical activity per week



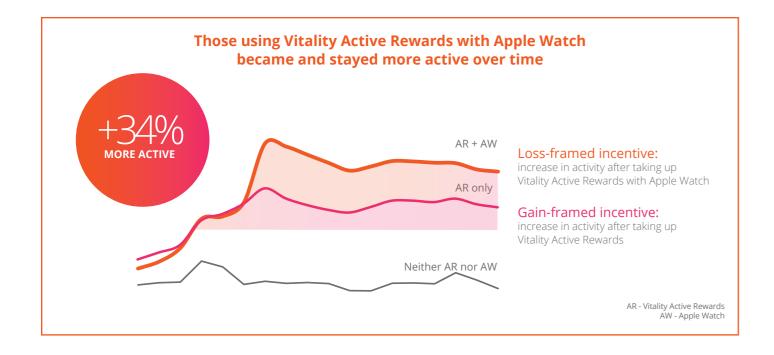
Note: The extends beyond 4000 MET Minutes a week as this includes leisure time and occupational physical activity



Encouragingly: it is possible to make people more active

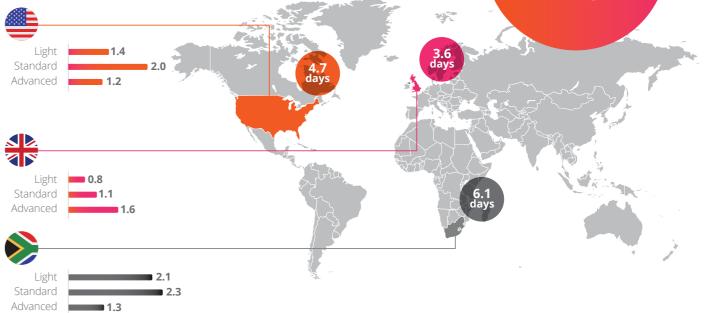
Vitality over many years has designed successful interventions to make people healthier. In 2015 we pioneered a step change in wearable tech and incentives by introducing Vitality Active Rewards.

The efficacy of this was validated by research conducted in 2018 by RAND Europe, which showed the ability for Vitality Active Rewards combined with Apple Watch to achieve sustained increases in activity. Being the largest behaviour change study on physical activity, it found that physical activity levels increased on average by 34% among users in the United States, United Kingdom, and South Africa.









Incentives to increase exercise levels have proven successful for people at risk

Percentage increase in physical activity for those with BMI > 30

United States of America +206% United Kingdom +160% South Africa +109%

Extract from the 2018 RAND Europe report on Incentives and Physical Activity

What is meant by being physically active?

Not all types and intensities of exercise are the same. **Metabolic Equivalent (MET)** measures the energy spent when exercising per minute – allowing for all exercise variations to be compared.

The World Health Organization minimum recommendation for adults aged 18 to 64 years is:

Which is equivalent to:



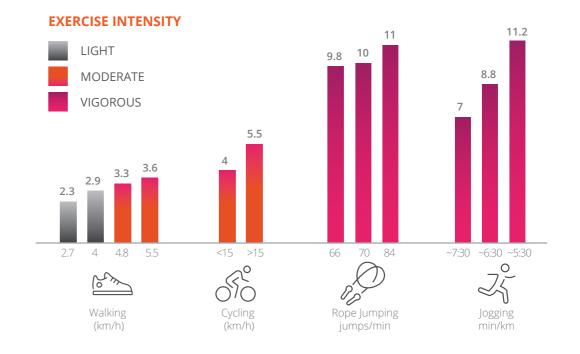




Only occupational and leisure time activities are considered in the definition of being active (i.e. sitting and sleeping are not included)

Exercises and the METs for every minute

For the average person aged 40, weighing 70kg



A note from RAND Europe

his study used one of the richest data sets on global wellness to date bringing a clearer picture of the true economic effects of workplace productivity to light.

We are pleased to have undertaken this comprehensive study to evaluate the economic benefits of making people more physically active. This is the first time that a multi-country computable general equilibrium macroeconomic model has been applied to the area of physical activity, which allows for a detailed assessment of the current and future implications of insufficient physical activity.

By simulating the real economy, this approach deepens our understanding of how inactivity affects all parts of it, beyond simply the traditional considerations of healthcare and mortality. Indeed, our analysis points to a significant relationship between inactivity and productivity loss, driven largely by ill-health related presenteeism. These insights provide policy makers and employers with new perspectives on how to enhance the productivity of their populations.

Hans Pung, President, RAND Europe



How the study worked

The study asks the question; what are the economic benefits of a more active population?

Following the 2018 study on Vitality Active Rewards with Apple Watch which showed that physical activity behavior can be changed, Vitality worked with RAND Europe to understand the economic benefits of doing so. This hopes to elevate the importance of physical activity for governments, insurers and business.

This is how the analysis worked:



Meta-regression analysis of **84 studies from around the world** >1 000 extracted effect estimates

Workplace productivity

Unique proprietary data from Vitality that provides one of the world's largest data sets on physical activity and workplace wellness.

Britain's Healthiest Workplace and Asia's Healthiest Workplace surveys.

120 000 participants across 7 countries – the UK, Australia, Malaysia, Thailand,
Sri Lanka, Singapore and Hong Kong

Economic model

The economic model is based on the impact of larger, more productive workforces.

Using a multi-country computable general equilibrium macroeconomic model, production within and between countries are taken into account using trade linkages.

Healthcare costs

While physical inactivity is strongly linked to preventable healthcare costs, the economic model does not take these relationships into account.

The requirement of a redistribution of labour and economic resources in the medium-term limits the ability to prudently account for the economic impact of decreasing healthcare costs from improved levels of activity. However, the study illustrated the potential impact on healthcare expenditure.

Benefits of increased activity for economies, individuals and business

The study shows that increasing activity could contribute greatly to the world economy, impact people's quality of life and boost productivity.



Simply by getting everyone who is inactive to meet the WHO minimum recommended levels of physical activity, our research highlights that we could achieve improvements in people's quality of life and have a positive effect on employers by increasing productivity.



MORE
YEARS OF LIFE

+2.5

Additional life years gained by becoming active

Average person aged 40



MORE PRODUCTIVE DAYS

+5

Additional productive days every year

Three scenarios were used to model the analysis

The study assesses how different physical activity improvement scenarios may affect the economy of countries over a 30-year time horizon, up to the year 2050.

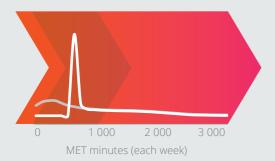
Three specific scenarios explained

Scenario 1

Making inactive people, active

Population distribution by amount of exercise a week

Everyone achieves at least the WHO recommended guideline of 150 minutes of moderate or 75 minutes of vigorous physical activity in a week.

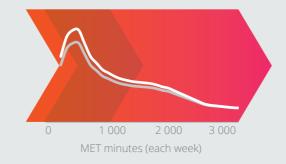


Global activity distribution

Scenario adjusted distribution

Scenario 2
Activity levels increase by 20%
Population distribution by amount of exercise a week

Everyone increases their physical activity by 20%



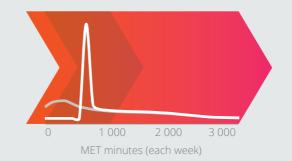
Scenario 3

Making inactive people active and the rest 20% more active

Population distribution by amount of

Population distribution by amount of exercise a week

Everyone below the WHO recommendation reaches this threshold, and everyone above this threshold improves their physical activity level by 20%.



Results under each scenario have a low and a high value

The low values consider only the direct economic effects of physical activity improvement. The high values include all indirect effects of physical activity on the economy, indicating that improvements in activity levels can increase the estimated gains in GDP considerably more over time.

Future economic benefits of physical activity

Future economic benefits are based on demographic projections of how the population of each country or region evolves over time. The base population is categorised for each country or region by age, sex and skill level. The study then applies assumptions on mortality, fertility and migration rates to show how benefits of improving physical activity evolve into the future and projects the economic changes for up to thirty years – by making the current population and future generations more active.

The impact of the three exercise scenarios

The annual economic impact of these new physical activity habits grows at a rapid rate – and has **double the effect over 30 years**.

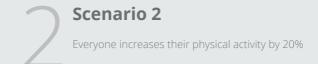
The economic impact from physical activity grows over time as the benefits of physical activity on mortality take effect.

Annual economic gains in today's value shown.

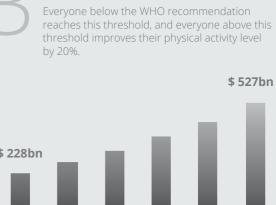


Everyone achieves at least the WHO recommended guideline of 150 minutes of moderate or 75 minutes of vigorous physical activity per week.









Scenario 3



Average per annum



A commitment to make people healthier

The effects increasing physical activity on the global economy are profound. The direct and indirect gains from a more physically active world will benefit everyone, including governments, public bodies, business and the individual.

Physical activity behaviour can be changed and the Vitality Shared-value Insurance model places companies in a unique position to monetise behaviour change. Given the difficulty of changing activity behaviour and the urgent need to do so, the insurers in the Vitality network have taken up this social responsibility to use the abilities of Vitality to make people more active.

"For executives from the global network of Vitality insurers, this study on the impact of physical inactivity on GDP is critical to highlighting the importance of exercise in the context of our global economy. It further strengthens our resolve to follow through on our industry commitment to act as a force for social good and to make 100 million people 20% more active by 2025." – Adrian Gore, Group Chief Executive, Discovery





Glossary of terms

A gain-framed incentive is a type of incentive in which individuals gain a specific reward for meeting certain requirements or goals. An example is Vitality Active Rewards.

A loss-framed incentive is a type of incentive in which individuals lose something or they have to pay back money when they do not meet requirements to qualify for the reward. An example is Vitality Active Rewards with Apple Watch.

Behavioural incentives are rewards that use principles of behavioural science to guide people to adopt a certain behaviour, for example to engage in physical activity.

MET is the rate of energy expended during an activity to the rate of energy expended at rest. For example, 1 MET is the rate of energy expenditure while at rest. World Health Organization recommends a minimum of 600 metabolic equivalent (MET) minutes of physical activity each week equal to 150 minutes of brisk walking or 75 minutes of running.

Presenteeism is when ongoing physical or mental conditions prevent employees from being fully productive at work. In cases of presenteeism, team members want to give their best efforts but cannot always deliver to their full potential because of these problems.

Shared Value is a business concept first introduced in 2006 by Harvard Business School professors Michael Porter and Mark Kramer. It is a strategy that gives companies a new way to achieve economic success through solving social problems. Shared Value is created by linking a company's success with individual client benefit and large-scale social progress. Today the benefits of building a business around social impact are touted by giants such as IBM, Google and General Electric.

Shared-value Insurance is a new category of insurance and part of the Discovery business model. Shared-Value Insurance, with Vitality at its centre, enables insurers to have a positive impact on large-scale societal needs without compromising its bottom line. Vitality helps people change behaviours that influence risk. This creates long-term value for the insurer, clients, and society.

Vitality Active Rewards is an additional benefit of Vitality's incentivised behaviour change programme that rewards individuals for tracking and reaching different thresholds of physical activity. Participants track their physical activity through a variety of fitness devices.

Vitality Active Rewards with Apple Watch is an additional benefit of Vitality Active Rewards. Members earn an Apple Watch by achieving weekly physical activity goals linked to dynamic monthly repayments and a small upfront fee. Reaching these goals can take the payment of Apple Watch to zero each month.

