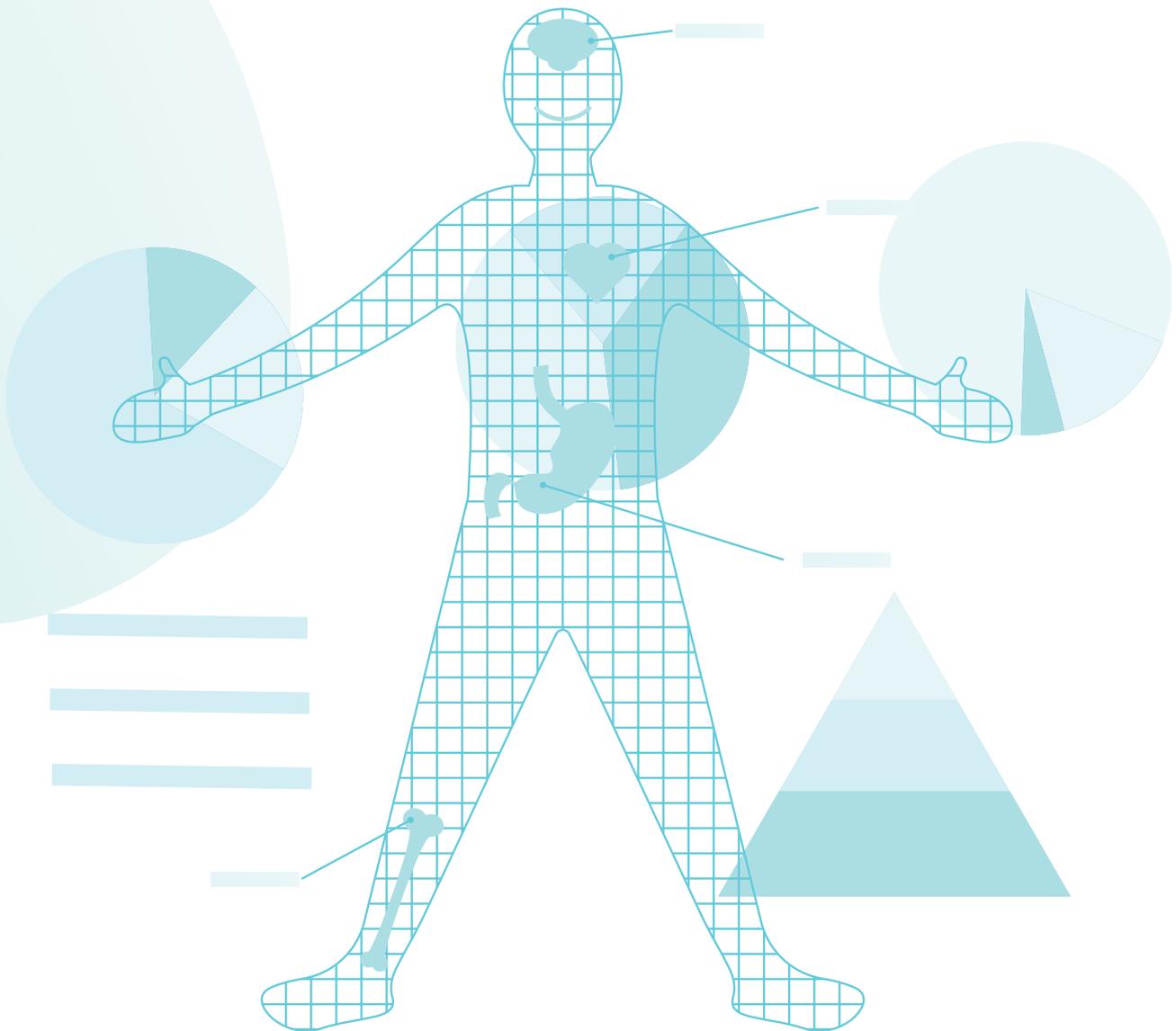


# newtopia

## A New One-Size-Fits-One Approach to Disease Prevention

How changing habits can reduce metabolic risk factors and lower healthcare costs



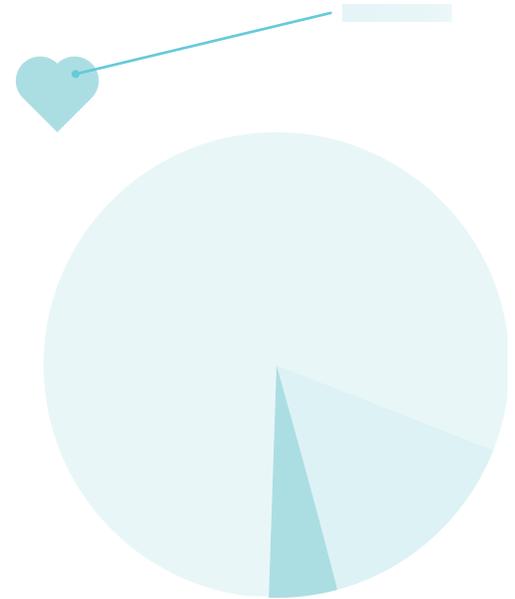
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# A New Reality

Benefit leaders are constantly challenged with doing more with less. Change is often a part of that equation. But the Covid-19 pandemic has taken these challenges to an entirely new level. Besides the potentially tragic effect on individuals, the virus has created significant economic pressure and uncertainty for companies. These pressures are expected to extend well into 2021.

While employers continue their efforts to keep employees safe, there is a less obvious side of safety that may be overlooked: the existing health of their employees. Five years ago, it was estimated that 60 percent of Americans had at least one chronic condition, and 42 percent had multiple chronic conditions; chronic disease prevalence continues to grow<sup>1</sup>. Chronic conditions we now know greatly impact the severity of COVID, as well as the cost to treat those infected.



REPORT

Reported hospitalizations, intensive care unit (ICU) admissions, and deaths among laboratory-confirmed Covid-19 patients with and without underlying conditions.

	No. (%)		
	Reported hospitalizations including ICU	Reported ICU admissions	Reported deaths
Among all patients	14	2.3	5.4
Among patients with reported underlying health conditions	45.4	8.5	19.5
Among patients with no reported underlying health conditions	7.6	1.5	1.6

Hospitalizations were six times higher among patients with a reported underlying condition than those without reported underlying conditions (45.4% versus 7.6%)

Deaths were 12 times higher among patients with reported underlying conditions compared with those without reported underlying conditions (19.5% versus 1.6%)<sup>2</sup>.

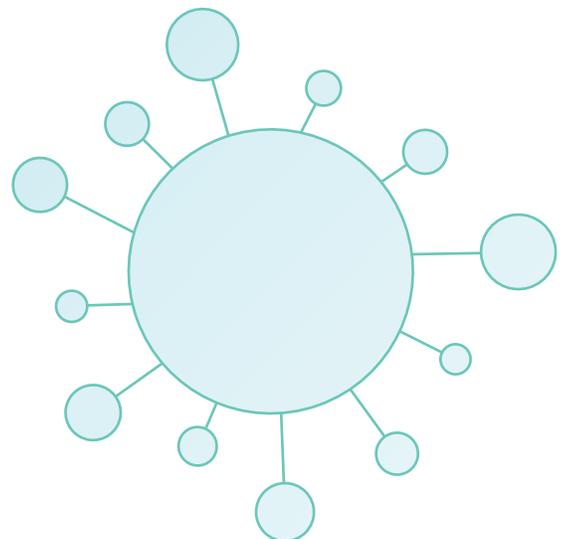
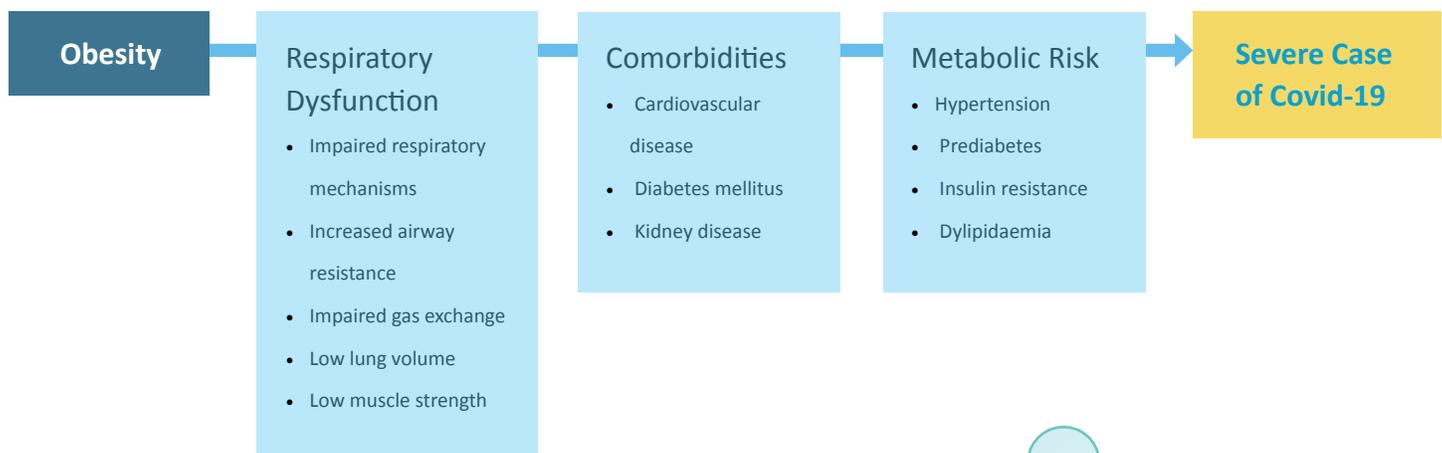
To fully protect your employees and your company from the effects of Covid-19, we must first address the underlying health risk factors that make this pandemic so deadly.

<sup>1</sup> www.rand.org/pubs/tools/TL221.html <sup>2</sup> www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6924e2-H.pdf

# The Obesity — Covid-19 Connection

Evidence now suggests that obese Covid-19 patients have a greater likelihood of becoming severely ill from the virus<sup>3</sup>. One study found obese patients had a 142% greater risk of developing pneumonia related to Covid-19.<sup>4</sup> The link is so compelling that the Centers for Disease Control have now included severe obesity as a separate risk factor for Covid-19 severity.<sup>5</sup>

## Weight as an Independent Factor in Covid-19 Severity



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If employers weren't already convinced of the significant impact obesity has on the health of their employees and their company, Covid-19 should serve as a wake-up call.

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# Obesity and Metabolic Syndrome

Metabolic Syndrome is the clinical term and risk categorization for pre-obesity, pre-type 2 diabetes, pre-hypertension, and heart disease. Nearly 47 million adults in the US have Metabolic Syndrome, or 24% of the population.<sup>6</sup> That means they have at least three of five risk factors. For those over 50 years of age, that number almost doubles (44%). Another 33% of the population have one to two risk factors.

Of all contributing factors for metabolic syndrome, waist circumference (BMI) is the most important indicator of risk.

## Risk Factors For Metabolic Syndrome

- 1 Out-of-range waist circumference or BMI
- 2 Elevated blood glucose
- 3 Elevated blood pressure
- 4 Elevated triglycerides
- 5 Low HDL cholesterol

**5x** as likely to develop  
type 2 diabetes

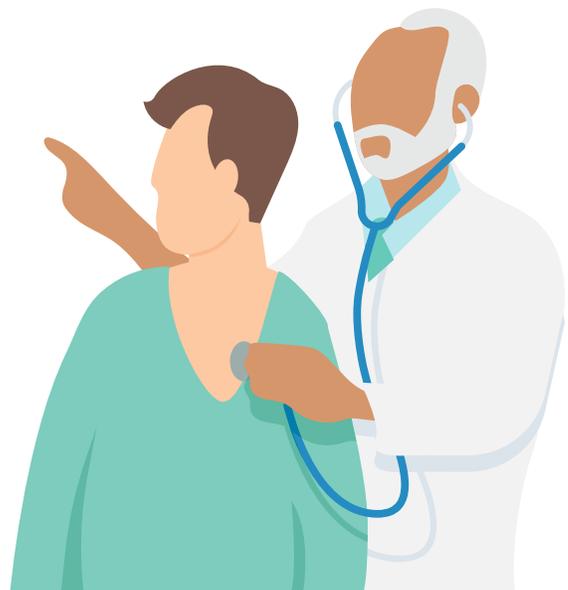
**2x** as likely to develop  
heart disease

**3x** as likely to develop  
stroke

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It is estimated that half of all adults will be obese in the next 10 years, leading to significant economic strain on employers and health plans.<sup>7</sup>

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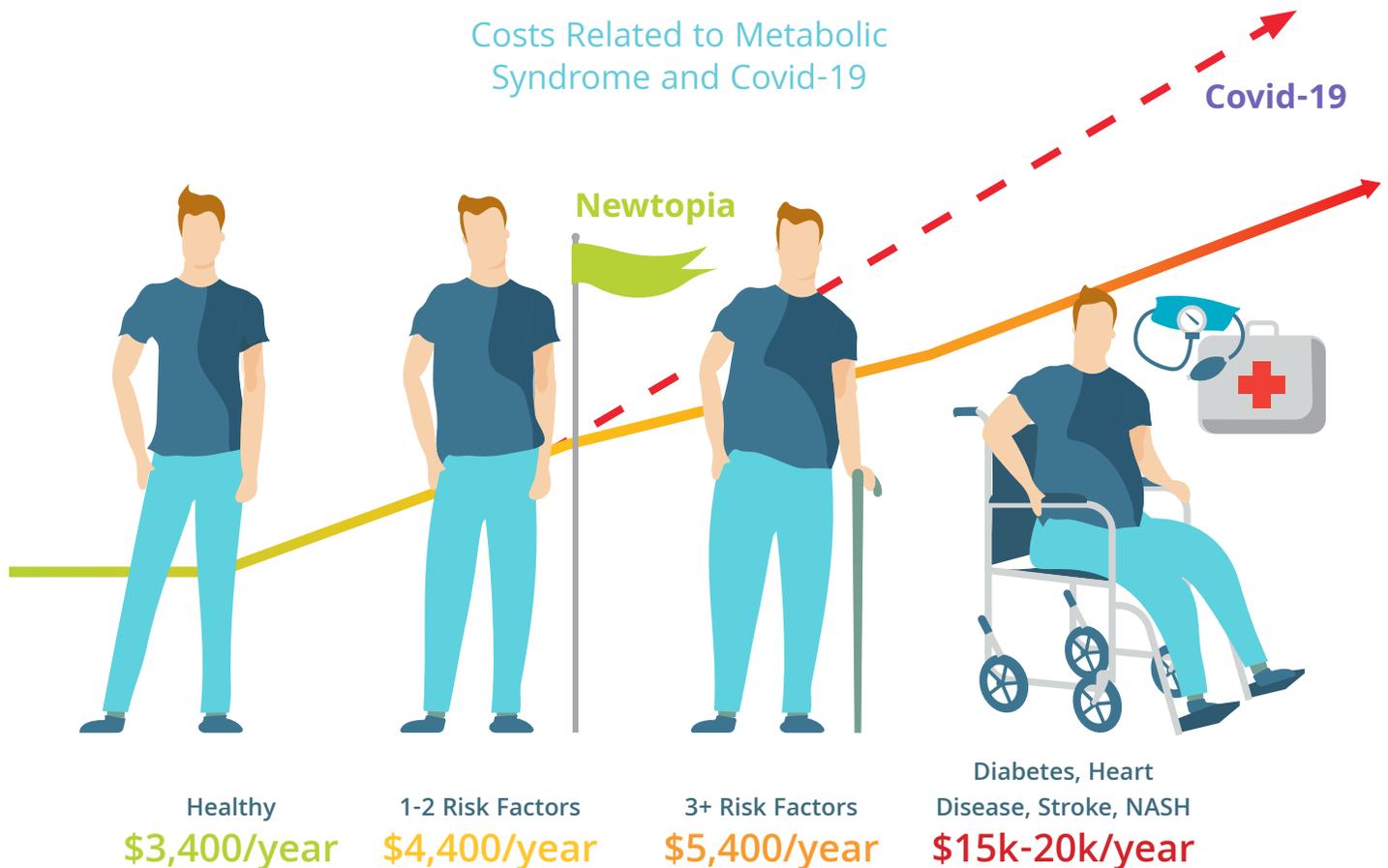
<sup>6</sup> [www.medscape.org/viewarticle/484166\\_2](http://www.medscape.org/viewarticle/484166_2) <sup>7</sup> [www.ncbi.nlm.nih.gov/pmc/articles/PMC5935926/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC5935926/)

# Obesity and Metabolic Syndrome

Chronic diseases cost the US more than \$3.8 trillion, nearly 20% of our nation's GDP.<sup>8</sup> For employers, a healthy employee will cost around \$3,400.<sup>9</sup> This is just for medical costs, not factors such as lost productivity. Today, most of a typical company's employees have at least one of the five factors leading to Metabolic Syndrome. For employees who have three factors, those costs increase 60%, or up to \$5,400. If you factor in the cost of treating one of these employees for Covid-19, the increase is exponential.

The financial health of a company is directly aligned with the health of its employee population.

## Costs Related to Metabolic Syndrome and Covid-19



Average Healthcare Cost per Member for US Payers

<sup>8</sup> www.fiercehealthcare.com/hospitals-health-systems/fitch-rain <sup>9</sup> Aetna Innovation Lab

# Could Your Benefits Program Do More?

As of the end of May 2020, more than 1.7 million people in the US had been diagnosed with Covid-19 and more than 100,000 had died.<sup>10</sup> While the virus has now leveled off and most areas of the nation have begun to reopen, some experts warn there may be an uptick of cases in the fall or even into next year. Harvard University recently released a new mathematical Covid-19 model that indicates we could see a resurgence as late as 2024.<sup>11</sup>

The point is that the virus will be with us for some time yet. That means employers will need to reinforce their efforts to keep employees—and their bottom lines—healthy. Evaluating the effectiveness of current health benefits programs is a great place to begin.

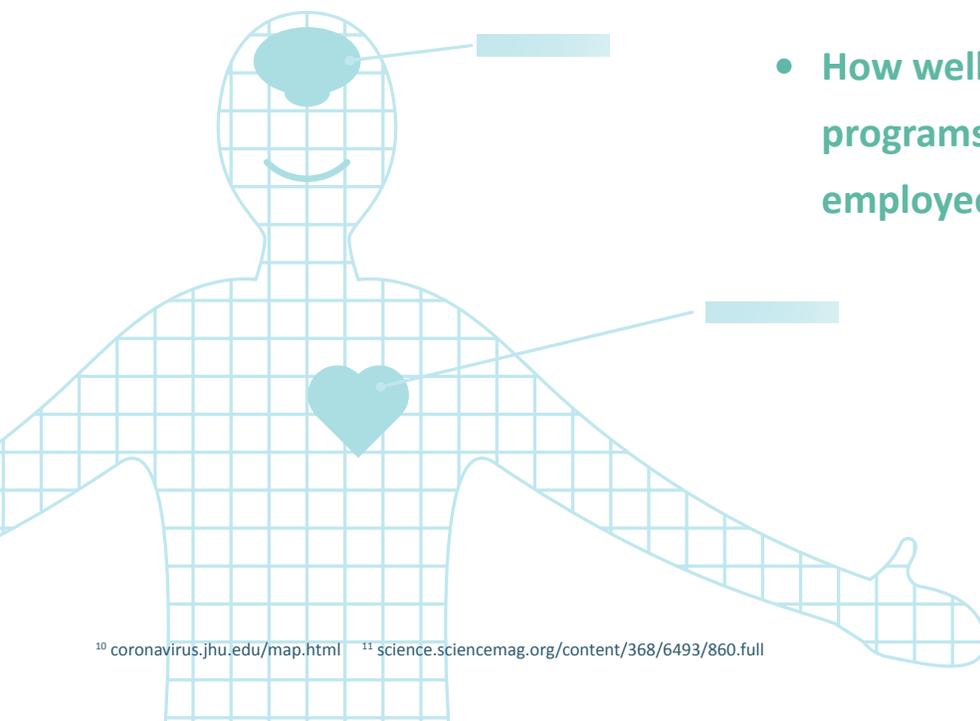
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Is your current benefits program driving value for your company and better health for your employees?

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Start by asking these questions:

- **Are your employees actively using existing benefits and programs?**
- **Have your healthcare costs gone down since implementing the programs?**
- **Have your current programs increased employee satisfaction and engagement?**
- **Do your benefits vendors guarantee performance?**
- **How well do your existing benefits programs align with your other employee-engagement programs?**



<sup>10</sup> [coronavirus.jhu.edu/map.html](https://coronavirus.jhu.edu/map.html) <sup>11</sup> [science.sciencemag.org/content/368/6493/860.full](https://science.sciencemag.org/content/368/6493/860.full)

# A Case Study for Success

In 2015, insurance giant Aetna partnered with Newtopia, a habit-change platform for disease prevention, to conduct a one-year program focused on reducing its employees' risk of developing metabolic syndrome.<sup>12</sup> The program included a limited genetic profile (opt in) and psychosocial assessment for each participant. Participants were also paired with an "Inspirator," an expert trained in the fields of nutrition, exercise, genetics, and behavioral science. Inspirators were chosen based on each participant's psychosocial profile. Participants also received a custom-built app that connected them to their Inspirator and a smart scale that was provided by Newtopia.

## Randomized Control Trial Results

**50%**  
remained engaged for  
12 months



\*p-value <0.001

**4.3%**  
body weight loss by  
76% or 10lbs\*



**\$1,464**  
first year reduction in  
medical costs compared to  
control\*\*



\*\*p-value <0.02

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90% of participants who stayed with the program for 2 years saw continued improvements averaging from 10 to 22 pound weight loss.

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# Behind the Results

Traditional employee health benefit programs see early progress as employees sign up and give it a try. But that approach is unsustainable as momentum wanes past the first few months when participants lose motivation or don't see the results they expected. According to Jeff Ruby, founder and CEO of Newtopia, "Traditional programs are based on a one-size-fits-all approach where every participant is given the same information in a limited number of formats. They're designed like a lesson plan or class you'd have in school, not around the individual."

Newtopia differs in that it provides personalized "one-size-fits-one" programs curated to each participant's unique needs and preferences, which are determined based on behavioral, genetic, and social determinant data.

Content is curated for the individual and gamified based on the participant's personality, motivation, and preferences, leading to long-term, sustainable habit change.

## Engagement Built Around the Patient, Not the Program



## Why Genetic Engagement?

In most cases, there is no single factor that causes an individual to gain weight. It's about more than calories in and calories out—much more. Lifestyle, family, environment, behaviors, personality, and motivation are all important contributors. Research now suggests genetics plays a role.<sup>13</sup>

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It's important that participants understand the role their genes play in their ability to lose weight. This insight helps Newtopia design a more customized experience with personalized lifestyle recommendations.

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### Engagement Built Around the Patient, Not the Program



#### **Eating Behavior Gene (DRD2)**

Regulates dopamine

Do you eat when you're stressed?

#### **Appetite Gene (MC4R)**

Regulates how quickly someone feels full when eating

Do you eat until you're full?

#### **Body Fat Gene (FTO)**

Determines how body breaks down fat

How easily do you gain weight?

<sup>13</sup> [www.ncbi.nlm.nih.gov/pmc/articles/PMC6656717/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC6656717/)

# About Newtopia

Newtopia is a habit change platform focused on disease prevention that delivers a 1:1 individualized approach by understanding social, psychological, and genetic insights. Our approach is proven to deliver value on investment for risk-bearing insurers in the form of reduced metabolic syndrome risk factors, medical claims savings and increased quality of life, productivity and morale for at-risk individuals.

Newtopia’s mission is to inspire people to live healthier lives and to give them the tools to make it happen.

PEER-REVIEWED STUDY

## Delivering Sustainable, Proven Results



We continue to replicate RCT results with participants in our commercial book of business

To learn more about Newtopia:

[www.newtopia.com](http://www.newtopia.com)