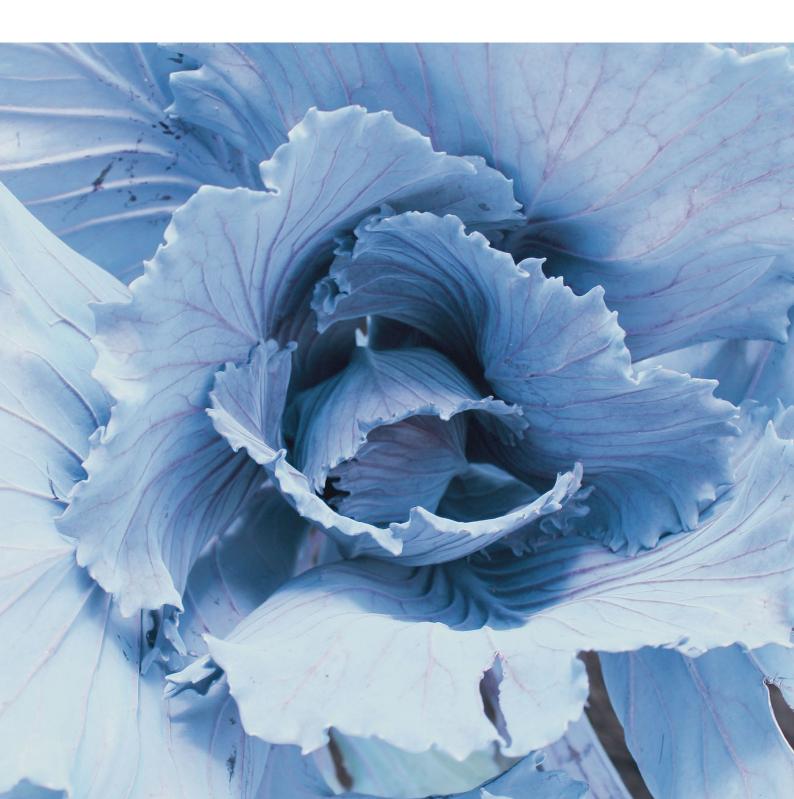
Calm:

The new concept at the heart of cardiovascular wellness



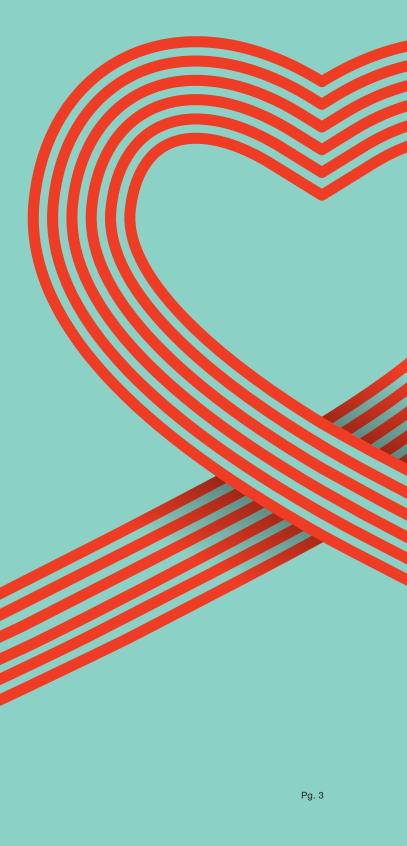




Introduction: CVD - A major concern for supplement users

Cardiovascular disease (CVD) is responsible for over 17 million deaths a year, and affects the majority of people over the age of 60 in some way. Along with diabetes, it is the most common health concern for older men in the west.

Given the prevalence of CVD – and the role of diet as a risk factor³ – it is unsurprising that cardiovascular health (CVH) is a common goal for users of dietary supplements. Of the most purchased condition-specific vitamin and supplement products, 38% are targeted at the prevention of heart disease.⁴ Accordingly, Innova Markets Insights describes the growth in supplements with a CVH positioning as a "key trend to watch".⁵



New insights into the cardiovascular health space

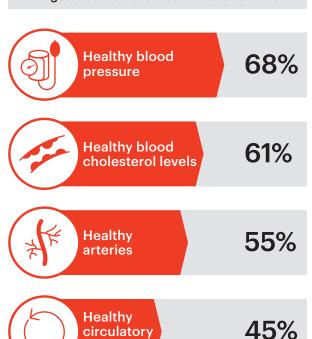
At Lycored, we know that cardiovascular wellness is complex, and never the result of quick fixes or magic pills. To gain new insights into the cardiovascular health space, we surveyed 505 male and female consumers in the U.S. and the U.K. All were over the age of 50, reflecting the demographic most likely to purchase these types of dietary supplements.⁶

We explored their CVH-related concerns, what they saw as the most effective cardiovascular wellness strategies, and their needs from supplements. We also tested the resonance of messaging relating to the new concept of "cardiovascular calm".

Blood pressure tops list of CVH concerns

The American Heart Association estimates that more than **100** million U.S. citizens have high blood pressure, which is a key factor in tens of thousands of deaths every year. It was perhaps to be expected then that **68%** of the consumers we surveyed ranked healthy blood pressure as one of the three CVH goals they most wanted to achieve, ahead of healthy blood cholesterol levels **(61%)**, healthy arteries **(55%)** and a healthy circulatory system **(45%)**.

CVH goals consumers most wanted to achieve



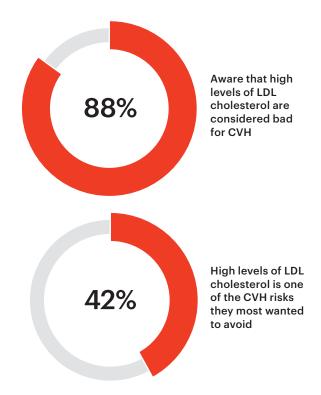
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Consumers understand LDL cholesterol risk

The second most common goal was the maintenance of healthy blood cholesterol levels. In fact, for American consumers this was almost as significant a concern as blood pressure.

Furthermore, our survey indicated high levels of understanding of what constitutes unhealthy cholesterol levels. Oxidized low-density lipoprotein (LDL) is a form of cholesterol known for its impact on cardio-metabolic wellness. Nearly nine in ten (88%) respondents were aware that high levels of LDL cholesterol are considered bad for CVH, and 42% chose high levels of LDL cholesterol as one of the CVH risks they most wanted to avoid (behind only risk of heart attack).

The fact that consumers are savvy when it comes to cholesterol levels indicates the potential success of products that can strengthen the body's response to LDL oxidation.



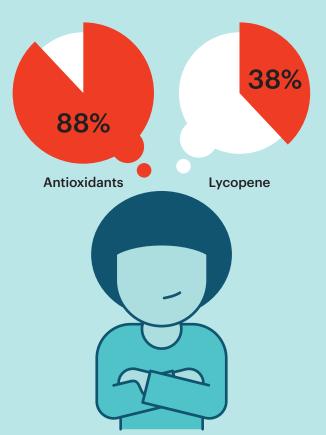
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Lycopene scores highly on recognition

The antioxidative and anti-inflammatory qualities of carotenoids mean they can play an important part in cardiovascular wellness.⁸ Lycopene has the highest antioxidant effect of all the carotenoids and is associated with a range of benefits for cardiovascular health.⁹

We presented survey respondents with a list of nutrients commonly linked to CVH. Eighty-eight per cent had heard of antioxidants and 38% had heard of lycopene. In America, name recognition for lycopene was particularly high, with over half (52%) of U.S. consumers having heard of it.

This high awareness is likely to be driven in part by the growing body of clinical research demonstrating the benefits of lycopene and other carotenoids for CVH.¹⁰



A holistic approach

Another key finding was that consumers see their CVH in very holistic terms. Overall, six in ten (59%) agreed with the statement "I believe in a holistic approach to cardiovascular wellness, including physical, mental and nutritional elements." This figure was even higher among U.S. consumers (65%).

Similarly, almost all (96%) respondents believed that physical, emotional and cardiovascular wellness are either closely connected or somewhat connected.

65%

"I believe in a holistic approach to cardiovascular wellness, including physical, mental and nutritional elements."

96%

"Physical, emotional and cardiovascular wellness are either closely connected or somewhat connected"

Diet and calm - the keys to cardiovascular wellness?

Our survey also explored what consumers saw as the most important ways to promote cardiovascular wellness. Scoring highest was healthy diet, with two thirds (67%) of respondents ranking it top of a list of four factors, ahead of regular exercise at 25%.

Reflecting this, two thirds (65%) of respondents said they had improved their diet in order to protect their cardiovascular health, while 53% had increased their exercise levels.

Perhaps a more surprising finding was that large numbers of consumers were consciously trying to introduce more calm into their lives. Four in ten (41%) overall – and 48% of those in the U.S. – had made attempts to increase their calmness in order to protect their CVH.

48% of U.S. consumers – had made attempts to increase their calmness in order to protect their CVH



Calm: A new way to promote CVH supplements

At Lycored, we offer a comprehensive package of marketing support to partners launching CVH products, so we know that positioning can be a challenge in an increasingly crowded marketplace. Some manufacturers report that it is difficult to label products "in a way that's appealing to the average consumer." 11

So, given that consumers see the value of calm to their CVH, could the concept of calm play a part in marketing strategies? Our survey provides compelling evidence that such an approach is likely to be effective.

We asked our respondents "How appealing do you find the idea of being able to 'calm your heart', in the same way you can 'calm your mind'?" Almost all (95%) said they found the concept either very appealing or somewhat appealing, and the figure was even higher in the U.S. (99%).

Furthermore, over a third (35%) of consumers overall, and 43% of those in the U.S., said they would be more likely to buy a CVH product if its branding or packaging included the word "calm".

In other words, manufacturers of CVH products could gain from shifting their value proposition from a negative (the avoidance of risk) to a positive (the promotion of daily calm).





Mediterranean and natural diets resonate

We also explored the link between nutrition, health and calm. When asked to pick the two diets most likely to provide them with a healthy calm, 53% chose one high in natural ingredients and 47% chose a Mediterranean diet. The concept of a Mediterranean diet had particular appeal for British consumers, with 62% linking it with the idea of a healthy calm.



Evidence and naturality trump price

Finally, we asked consumers which factors were most important to them when buying a supplement for their CVH. Over half (54%) ranked "It offers benefits that are supported by scientific evidence" as the most important factor, with "It contains natural ingredients" second on 23%. Both were seen as more important than price.



Lycored's Cardiovascular Clinical Health Program

Cardiomato® is Lycored's supplement-ready tomato nutrient complex for heart health. It contains six phytonutrients standardized to precise levels to induce a synergistic effect on cellular processes positively affecting cardiovascular wellbeing.

Several years ago we embarked on a major program of clinical research to investigate Cardiomato's safety and effectiveness. We have now completed four controlled clinical trials involving a total of 271 subjects. They have demonstrated a range of benefits for cardiovascular calm:



Benefits for blood pressure

Previous research indicates that Lycored's standardized tomato extract, Cardiomato, helps maintain blood pressure within normal range. ¹² In our most recent clinical trial, researchers investigated its blood pressure-lowering effects in hypertensive subjects, comparing them to lycopene alone.

Sixty-one volunteers aged between 35 and 60 and affected by hypertension took part in a double-blind randomized study. They were given capsules containing the active standardized tomato extract (with doses of 5, 15 or 30mg of lycopene), synthetic lycopene, or a placebo, and instructed to take them with their main meal.

Treatment with Lycored's active standardized tomato extract containing lycopene was associated with statistically significant reductions in blood pressure. However, similar effects were not observed for any of the other treatments. The findings indicate that Cardiomato has beneficial outcomes for hypertensive patients that lycopene alone does not.

A possible explanation for these results is the role of the other phytonutrients also present in Cardiomato. This would explain the lower efficacy of synthetic lycopene, which does not contain any other tomato component.¹³



Reducing oxidized LDL cholesterol

Cardiomato has also been shown to help reduce levels of LDL cholesterol.

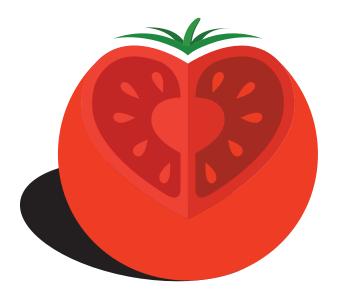
In a randomized, double-blind, placebo-controlled study, 146 healthy, normal weight individuals were given a daily dose of either Cardiomato or placebo over a two-week period. Oxidized LDL, glucose, insulin, and triglyceride responses were measured after ingestion of a high-fat meal before and at the end of intervention.

Cardiomato was found to increase carotenoid levels in plasma and reduce levels of LDL.¹⁴

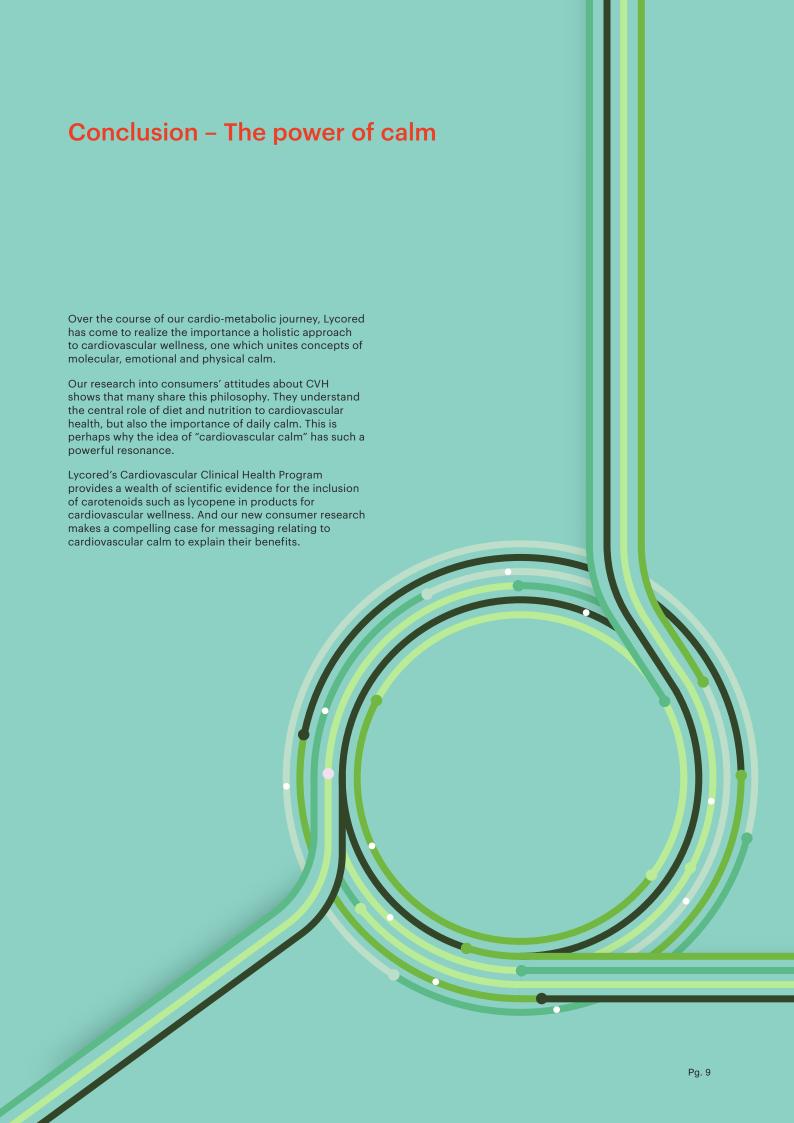


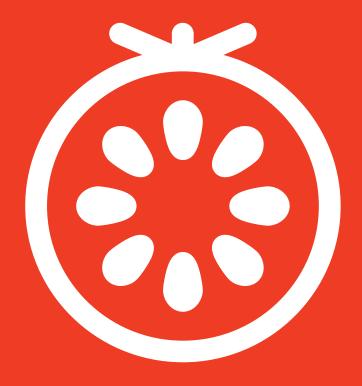
A healthy circulatory system

The carotenoids in Cardiomato have also been shown to support a healthy circulatory system. In a 2011 study, 126 healthy men were randomized to receive either a placebo or standardized tomato extract daily for eight weeks. An increase in serum lycopene after supplementation was found to reduce oxidative stress, which may play a role in endothelial function.¹⁵



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