

# Does breast milk boost athletic performance in adults or cure cancer?

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Does breast milk boost athletic performance in adults or cure cancer? Or is this all just a weird internet fetish?

There's something a little bit magic about breast [milk](#).

We're often told "breast is best" when it comes to [babies](#). That's because breast milk has all the [goodness a baby needs to grow and thrive](#).

It's custom-made by mum to have the perfect blend of vitamins, fat and protein. It can even [protect against certain nasties like diarrhoea](#), which may be a small inconvenience for [adults](#), but it can be deadly for babies. In fact, it's the [second leading cause of death in children under 5](#).

It's all these super-special qualities that have some *adults* wondering is breast best for more than just babies?

## The black market of breast milk

There is a real demand for breast milk in the world.

So much so that people [trade](#), [buy and sell](#) it online, like a weird black market of breast milk.

Most of the demand comes from mums who can't breastfeed but still want [human milk](#) for their bubs.

But some of it is coming from grown men and women.

For a lot of us, the idea of drinking breast milk beyond toddlerhood comes with a strong 'ick' factor.

After all, breast milk is a human bodily fluid. Most sensible people know to avoid other's faeces, urine and blood where possible. Heck, most people are uncomfortable even sharing a toothbrush or drink bottle due to the saliva exchange. And don't even get me started on the more 'intimate' fluids.

We don't avoid these things just because they're gross. We do it because human fluids are like disease delivery guys. They bundle up packages of [hepatitis](#), [gastroenteritis](#) and [STDs](#) to ship off to unwitting and very unfortunate recipients.

Though breast milk may have a warmer, fuzzier reception than other bodily fluids, it can still be a [transmitter of serious diseases like HIV](#).

So why on Earth are grown adults trawling secret Facebook groups for the chance to drink it?

## **Human milk vs protein shake**

There are some [athletes](#) who believe breast milk is the magic elixir they need to boost performance.

We all know how much gym junkies love their protein, and breast milk certainly has its fair share.

But is there really some special sauce in breast milk to get your gainz?

Associate Professor Jill Sheriff of Curtin University is an expert in

nutritional biochemistry. Some of her main research areas are breast milk and nutrition for premature infants.

While breast milk contains the right nutrients for babies, Jill says there are no nutritional benefits for adults that "can't be obtained from other food sources".

Not only that, but because breast milk is designed for tiny tummies, most of the immune benefits it has can be lost in the harsh environment of a grown-up gut.

"Some of the immune-enhancing proteins in breast milk wouldn't survive in an adult gut because it is more mature [the stomach produces more acid, and the levels of certain enzymes are higher]," Jill tells us.

So if you want to start bulking, it'll be quicker, healthier and less creepy to go chicken breast over breast milk.

### **The breast medicine for cancer?**

As someone whose family has been affected by cancer, I understand the desperation to find cures.

You would try anything if you thought it meant a better outcome for you or your loved one—apparently, even drinking breast milk.

Over the years, you may have seen a news story or two about [Jenny Jones](#), a woman who started drinking breast milk after being diagnosed with cancer. As a lactation consultant, she saw the benefits for babies of drinking breast milk and thought it might help in her fight.

She began drinking the rejected milk from milk banks to boost her immunity during a bone marrow transplant. She also received

chemotherapy but believes the breast milk had a large part to play in her treatment.

So is there any science to back up her story? Or is it just spreading false hope?

Swedish researcher [Professor Catharina Svanborg](#) has been looking into breast milk's cancer-killing abilities.

Her research focuses on human alpha-lactalbumin made lethal to tumour cells (HAMLET).

To cut a long story short, HAMLET is a substance formed by molecules found in breast milk, with the ability to kill [cancer cells](#) while leaving healthy cells alone.

[Human trials had some promising results](#). Bladder cancer patients shed dead cancer cells through their urine when given HAMLET.

I reached out to Cancer Council WA's research development coordinator to see if these results were cause for celebration. They consulted with a local cancer researcher before answering.

Their response? Don't get too excited.

"There are some experiments with cancer cells in culture showing some anti-cancer properties, but on checking [clinicaltrials.gov](#) just now, the biggest clinical trial library worldwide, there appear to be no recently completed or currently ongoing studies with [HAMLET]," they said.

"Whether it is more promising than other substances with evidence of anti-cancer activity in cells and animals is hard to say."

That isn't deterring Catharina, who's been [trying to get her treatment to market](#).

But even if HAMLET does take off as the next new cancer treatment, patients won't get the same effect from drinking a stranger's breast milk they bought on the internet. [For HAMLET to work, it has to be folded in a particular way](#). Therefore, it needs a bit of tinkering in the lab to ensure it's effective.

## Think of the children!

So is there *any* reason at all for an adult to drink breast milk?

We'll probably never really know for sure.

Breast milk for adults isn't exactly an area with a lot of research interest. We're still learning about breast milk for babies, and [there isn't a whole lot of milk to go around](#).

A mother's breast milk is first and foremost for her baby. Even if she had an [excess supply](#) and wanted to donate it to a [milk bank](#), premature babies get first dibs.

Next would be babies whose mothers for one reason or another can't breast feed.

Then way, *way* down the bottom of the list would be adults.

Because [breast](#) milk is so important for babies, giving it to adults just isn't a priority for milk banks or researchers.

"Even if it were useful, where would we get enough [human breast milk](#) from for [adults] to drink?" Jill asks.

She doesn't believe it's an area that warrants research and the precious resources that go with it, saying there are "far more important issues to be addressed".

So let's act like adults here and leave [breast milk](#) for babies.

This article first appeared on [Particle](#), a science news website based at Scitech, Perth, Australia. Read the [original article](#).

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