

# Down on the Farm

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There's more to this fish story than meets the eye.

You probably heard about the recent study showing that farm-raised salmon contain higher levels of toxins than wild salmon. The University of Indiana researchers who conducted the study suggest that consumption of farm-raised salmon should be kept to a minimum.

But before you forever swear off salmon (one of the best sources of omega-3 fatty acids), you should know that some of the important details about this study weren't reported by most newscasters.

## Wild prices

Here are the basics: Researchers from the University of Indiana (UI) collected two metric tons of salmon from seafood stores in North America, South America and Europe. Some samples came from farm-raised salmon, and some from wild salmon. The fish samples were examined for traces of cancer-causing toxins such as polychlorinated biphenols (PCBs), and dioxins. The UI team found "significantly higher" traces of contaminants in farm-raised salmon than in wild.

So what's the hubbub? You'll just buy wild salmon, right? Well, if you haven't priced wild salmon, you're in for some serious sticker shock. It's quite a bit more expensive than farm salmon. And that extra expense is high enough that many people would probably decide to just go without. Which would be a shame, considering the excellent nutrition that salmon provides.

But is it really necessary to go without? Are the toxins in the farm fish really all that bad? Without question, dioxins and PCBs are not what you want on your menu. But you don't really have much choice.

## Where's the beef?

Let's start with dioxins. Dioxins are carcinogenic chemicals created by burning waste materials and fuels, such as coal and oil. Thanks to concerted environmental efforts, emissions of dioxins have dropped in recent years, but dioxins are persistent compounds; once created, they stick around for a long time.

Needless to say then, you don't want to eat anything containing dioxins. But according to the Environmental Protection Agency, beef, dairy products, chicken and pork all contain more dioxins than fish. So chances are good that you've already ingested some amount of dioxins today.

In addition, the levels of dioxins the UI researchers

found in farm salmon are below the allowed thresholds set by the FDA, the European Union, and the UK's Food Standards Agency.

I'm not exactly best friends with any of those regulatory agencies, so I can't say this reassurance is at all comforting. But the point is that the dioxin contents detected in the farm salmon weren't exactly off the charts. So if you pass on the farm salmon and order the steak instead, don't imagine that you'll be going dioxin-free. In fact, you might be getting more dioxins in the beef.

## Number crunching

Like dioxins, PCBs are chlorine contaminants. And like dioxins, you don't want PCBs in your diet. But you can be certain that they're there.

The UI study found an average PCB content of 36 parts per billion (ppb) in farm salmon as opposed to 3 ppb in wild salmon. So we'll give the UI researchers the benefit of the doubt and say, sure, that's a significant difference. But it's not quite so significant if it's put into a wider context.

The FDA has set the acceptable limit of PCBs at 2,000 ppb. So let's say we believe the FDA's acceptable level is 20 times higher than it should be. Even by this far more severe standard, the PCBs in the farm salmon are still 64 ppb below the acceptable limit.

Of course, the only truly acceptable limit of carcinogenic chemicals in food is zero. But we have to be realistic about our food supply. I think we'd need to turn the clock back several decades to guarantee foods that are contaminant-free. That's just one of the reasons why an occasional detoxification procedure can be so helpful.

## Risk benefit ratio

There's no doubt that farm-raised salmon contains contaminants. But this one study alone is not comprehensive enough to dismiss the nutritional value of farm salmon.

So if you're uncomfortable with the idea of ingesting toxins, then go with the wild salmon (especially if you're wolfing down a couple of pounds of salmon each week). But if you decide to stick with the farm salmon, the long-range health benefits will most likely far outweigh the long-range risks.

And as always: Beware the sound-bite mind-set of newscasters. Their job is not to inform you, but to keep your attention with scare headlines and "shocking" reports.