Healthy Cooking with Safe Cookware: Keep it Real

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Whether therefore ye eat, or drink, or whatsoever ye do, do all to the glory of God.

1 Corinthians 10:31

Nothing is more annoying when cooking than having off flavors or undesirable products leaching into your food. But sometimes this is the price paid to find a surface that does not leave more food stuck to the pot or pan than on the plate. Or is it? Many of us have used non-stick cookware since its production in the 1940's. Only recently do we begin to understand the interactions of using these products in our world. As always, God gives us alternatives that can be safe and affordable.

Well, what is the deal about using non-stick coating on my cookware, frying pans and cookie sheets? Fluoropolymers are high performance plastic polymers that contain carbon & fluorine that can withstand high temperatures and harsh chemicals. Some examples are polytetrafluoroethylene (PTFE, i.e. Teflon) and PFOA (perfluorooctanoic acid) which is used as a surfactant to add the PTFE coating to non-stick cookware. PFOA has been found at low levels in the blood of Americans at 5 parts per billion. The US EPA mandated over 10 years ago that companies voluntarily stop using PFOA by 2015. However, PFOA is persistent in the environment as it is used to bind other fluoropolymers. Both the EPA and American Cancer Society suggest "possible carcinogenicity of PFOA" (EPA's 2016 *Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA)*. Regulatory agencies have decided that PFTE coatings are "safe".

Item	Pros	Cons
Cast iron	 Naturally non-stick Durable; can last for 100+ years Can be used stovetop or in oven Great for browning, frying, stewing & baking foods 	 Can't use soap Can't air dry Very heavy Can rust if not dried immediately NOT dishwasher safe
Porcelain enamel on steel base (granite)	 Naturally non-stick Great for browning of food Can be used on stovetop or in oven Affordable Dishwasher safe Used for millennia for cooking 	•
Non-stick PFTE (Teflon brand name)	 Non-stick PTFE coating Little or no oil needed Lightweight Dishwasher safe Easy cleanup to save time in kitchen Very heat resistant Lasts for years 	 Leaches chemical fumes into air when over-heated causing flu-like symptoms Pet birds are susceptible to chemicals released into air when heated and die quickly via suffocation
Ceramic coated	 Non-stick Lightweight Maintain different colors at high heat Stain resistant even in whit color 	 Thin coatings easily scratched with metal utensils Must use non-metal utensils Sol-gel ceramic like coating does not last as long as PFTE coatings
Aluminum	AffordableLightweightStrong	 Can give off-flavors to food Regulatory agencies state no link to Alzheimer's' disease or dementia

Item	Pros	Cons
Stoneware	Even heating when bakingNo leaching of any chemicals or minerals	Heavy Can be expensive
Stainless Steel	 rust-free stain-resistant stable under extremely high temperatures Can use metal utensils Lasts for years Dishwasher safe 	Not non-stick
Pyrex or Corning ware (glass)	 Great for baking Lasts for 20+ years Microwave & dishwasher safe	No stovetop use

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BAMBOO CAST IRON CERAMIC CORNING FLUOROPOLYMER GLASS GRANITE HEAT IRON MELAMINE METAL NON-STICK PANS POTS PYREX SCRATCH SEASONED **SILICONE** SKILLET STAINLESS STEEL **STONE TEFLON TEMPERATURE UTENSILS**

ALUMINUM

ANODIZED

Where do I find
PTFE use in the
world?
Teflon nonstick
cookware
nail polish
curling irons
stain resistant
carpets
stain resistant
clothing
industrial machine

parts



Japanese study shows that pan frying and grilling protect more of the omega 3 fatty acids DHA and EPA than deep frying fish.



Sources:

- Good Housekeeping Nov 13 2007
- The CMA Guide to Cookware & Bakeware 2015 edition

WOODEN SPOON

- Whitford Product Knowledge Network (PKN)
 http://www.productknowledge.com
- EPA's (May) 2016 Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA)

Should I throw out scratched Teflon cookware? Food Science experts say "no" unless it is no longer non-stick & that the flakes are indigestible. I toss all scratched surface cookware or food storage plastic-ware. Buy quality heavy cookware to last longer.

