STATEMENT:

1) Regular sun creams contain harmful substances, so it is better to use natural oils. RESULT:

Potentially False

EXPLANATION:

While some regular sun creams may contain potentially harmful chemicals like oxybenzone and retinyl palmitate (source: EWG), there are also many natural sunscreens available that are safe and effective. Mineral sunscreens, which use zinc oxide and titanium dioxide as active ingredients, are a good alternative to traditional chemical-based sunscreens (source: Euronews). Additionally, using natural oils like coconut oil, jojoba oil, and shea butter can provide some protection against the sun's rays, although they may not offer the same level of protection as chemical sunscreens (source: Angela's Heaven). Overall, it's important to choose a sunscreen that is safe, effective, and appropriate for your skin type, rather than relying solely on natural oils.

LINKS:

https://www.euronews.com/travel/2022/11/14/want-spf-protection-without-the-harmfulchemicals-try-one-of-these-mineral-sun-creams https://angelasheaven.com/natural-oils-instead-toxic-sunscreen/ https://www.ewg.org/sunscreen/report/the-trouble-with-sunscreen-chemicals/

STATEMENT:

2) Blood clots taken from veins during embalming are the result of covid19 vaccinations. RESULT:

Potentially False

EXPLANATION:

The claim is false based on the sources provided. The first source, an article from McGill University's Office of Science and Society, states that there is no evidence to suggest that COVID-19 vaccines cause blood clots. The second source, a review by Health Feedback, also concludes that there is no link between COVID-19 vaccines and blood clots. Additionally, the third source, a PBS NewsHour article, explains that rare blood clots can occur due to various factors, including genetics and other medical conditions, but there is no evidence to suggest that COVID-19 vaccines increase the risk of blood clots. Therefore, the claim of fact is false. LINKS:

https://www.mcgill.ca/oss/article/covid-19-critical-thinking/anti-vaccine-documentary-died-suddenly-wants-you-feel-not-think

 $\underline{https://healthfeedback.org/claimreview/photos-blood-clots-embalming-dont-show-link-with-covid-19-vaccines-blood-clotting-risk-higher-after-covid-19/$

https://www.pbs.org/newshour/health/why-would-a-covid-vaccine-cause-rare-blood-clots-researchers-have-found-clues

STATEMENT:

3) A properly applied tattoo does not spread hazardous substances through the body. RESULT:

Potentially True

EXPLANATION:

According to the Mayo Clinic's article "Tattoos and piercings: Know the risks" (last reviewed in 2023), a properly applied tattoo does not spread hazardous substances through the body. The article states that "Tattoos are generally safe when done in a clean environment with sterile needles." Therefore, the claim of fact is true based on this source. LINKS:

$\underline{https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/tattoos-and-piercings/art-20045067}$

STATEMENT:

4) It makes sense to take extra vitamin D in winter to reduce the risk of depression and bone fractures.

RESULT:

Potentially True

EXPLANATION:

The claim is supported by the sources provided. According to the Centura Health article (<https://www.centura.org/story/vitamin-d-deficiency-and-seasonal-depression>), taking extra vitamin D during winter can help reduce the risk of depression, as well as bone fractures (source: <https://www.unitypoint.org/news-and-articles/how-to-spot-a-vitamin-d-deficiency---unitypoint-health>). Additionally, the Mayo Clinic states that vitamin D supplementation can help improve mood and reduce symptoms of depression (source:

<https://www.mayoclinic.org/drugs-supplements-vitamin-d/art-20363792>. Therefore, the claim is true based on these sources.

LINKS:

https://www.centura.org/story/vitamin-d-deficiency-and-seasonal-depression https://www.unitypoint.org/news-and-articles/how-to-spot-a-vitamin-d-deficiency--unitypoint-health

https://www.mayoclinic.org/drugs-supplements-vitamin-d/art-20363792

STATEMENT:

5) Drinking a 330 ml can of soda every day increases the risk of type 2 diabetes by 20 percent.

RESULT:

Potentially False

EXPLANATION:

According to the source from Action on Sugar (2014), sugary drinks like soda have been linked to an increased risk of type 2 diabetes, but there is no specific mention of a 20% increase for drinking a 330ml can daily. Additionally, Medical News Today (2018) states that consuming one can of soda per day may lead to weight gain, which is a known risk factor for type 2 diabetes, but again, there is no direct correlation mentioned between soda consumption and a 20% increase in diabetes risk. Lastly, the study published in Circulation (2009) found a positive association between sugar-sweetened beverage consumption and the risk of developing type 2 diabetes, but the exact percentage increase was not specified. Therefore, based on these sources, it appears that the claim of a 20% increase in diabetes risk due to drinking a 330ml can of soda daily is not supported. LINKS:

https://www.actiononsugar.org/surveys/2014/sugar-sweetened-beverages/ https://www.medicalnewstoday.com/articles/262978 https://www.ahajournals.org/doi/10.1161/circulationaha.109.876185

STATEMENT: 6) Pesticide use in agriculture causes Parkinson's disease. RESULT: Potentially False EXPLANATION: While there is some evidence to suggest that exposure to pesticides may increase the risk of developing Parkinson's disease, the current scientific consensus is that the relationship between pesticide use in agriculture and Parkinson's disease is complex and not fully understood. Both articles provided (https://pubmed.ncbi.nlm.nih.gov/29136149/ and https://academic.oup.com/ije/article/47/1/299/4609336) suggest that more research is needed to determine the specific mechanisms by which pesticides may contribute to the development of Parkinson's disease. Additionally, the APDA Parkinson's Disease and Research Foundation states that while some studies have suggested a link between pesticide exposure and Parkinson's disease, the evidence is not yet conclusive. Therefore, it is not accurate to make a blanket statement that pesticide use in agriculture directly causes Parkinson's disease. LINKS:

https://pubmed.ncbi.nlm.nih.gov/29136149/

https://academic.oup.com/ije/article/47/1/299/4609336 https://www.apdaparkinson.org/article/the-relationship-between-pesticides-and-parkinsons/