Could Maillard ALEs/AGEs Comprised Rapeseed Oil be Frying Immune Response and Sauteing-up Symptomatic COVID-19 and Its Variants? A Pilot Single Case Study Analyzes Colorfully Hedonic Vegetable Oil and Its Potential Influence on Redox Biophysics and Immune Response

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Abstract

For forty-three years, countless researchers, professors, public health organizations, agencies, associations, societies, specialists, clinicians, and consumers assumed the health claims of vegetable oil were accurate. And that Maillard reaction generated advanced lipoxidation end-products (ALEs) and advanced glycation end-products (AGEs) within rapeseed oil was low calorie and not toxic. Without ever testing the integrity of manufacturers’ declarations of Maillard ALEs/AGEs comprised rapeseed oil (MAR) and its numerous vegetable oil offspring.

The purpose of this pilot single case study is to try the feasibility of a more considerable inquiry deciding the influence or lack of effects of MAR’s in vivo footprint on lipoproteins, thyroid function, redox biophysics, inflammation, immune strength, and potential to host symptomatic COVID-19 sepsis.

The subject met all inclusion criteria and gave a lipid panel and TSH blood sample before starting the day’s food challenge. The first challenge consisted of raw MAR and first pressed olive oil (FP) in mashed sweet potato and green alkaline shake, followed by MAR and FP baked in green alkaline hummus. MAR challenged and FP fried lima beans and MAR and FP previously fried salmon oil baked in green hummus. The last two challenges were fried sweet potato oil baked in green hummus and fast-food white potatoes fries.

Challenges produced evidence suggesting MAR is associated with chronic disease, not longevity in the subject studied. MAR’s 19% increase in TG and VLDL in the first challenge suggested MAR contributed to subclinical atherosclerosis, potential diabetes, renal insufficiency, atrial fibrillation, stroke, neuronal damage, overweight, cognitive dysfunction, and increased risk of hosting COVID-19 in the person studied. MAR’s 29% increase in Thyroid Function (TF) reflected its ability to surge systemic oxidative stress (SOS: pE- > pH+) and exercise a powerful influence on thyroid hormone and cellular and organ damage. Maillard end-products lead to tissue and cell damage, apoptosis, and cell death secondary to augmented endoplasmic reticulum stress, leading to neuronal damage and other public health maladies.

A more considerable investigation is warranted to analyze the influence of MAR on in vivo lipoproteins, thyroid function, redox biophysics, inflammation, immune integrity, and potential to host symptomatic COVID-19 sepsis and sepsis secondary to its variants.

COVID-19 and its variants are here to stay within our collective nasopharynx. Masks and vaccines are not likely to substitute for immune strength fostered by redox/digestion-balanced international culinary medicine and dynamic longevity lifestyles.

Keywords: COVID-19 risk; Vegetable oil; Maillard abuse disorder; Redox biophysics; Immunosuppression; International culinary medicine

Introduction

For forty-three years, countless researchers, professors, public health organizations, agencies, associations, societies, specialists, clinicians, and consumers assumed the health claims related to vegetable oil were accurate. And that Maillard reaction generated Advanced Lipoxidation End-products (ALEs) and Advanced Glycation End-products (AGEs) within rapeseed oil was low calorie and not toxic. Without ever testing the integrity of manufacturers’ declarations of Maillard ALEs/AGEs comprised rapeseed oil (MAR) and its numerous vegetable oil offspring.

Manufacturers of MAR continue to boast about the physical impossibility that MAR contains healthful (cis) Omega-3 polyunsaturated fat (cis-O-3) and 0g disease-causing trans-O-3 (Figure 1).

Makers of MAR also brag 0.6g (cis) polyunsaturated fat [cis-O-3 and cis-omega-6 (cis-O-6)] and 3.2g of (cis) monounsaturated fat [cis-omega-9 (cis-O-9)] (Figure 2).

Health claims made by the manufacturers of MAR are biophysically impossible. Triple bond-containing substances are explosives used in destruction and terror. The tiniest spark, increase in temperature, or pressure causes an explosion of remarkable magnitude. cis (the opposite of trans) double bonds within first pressed organic olive oil’s (FP’s) cis omega 3, 6, and 9 snaps to their unhealthy trans-fat correlate when heated to high temperatures and under extreme pressure or when separated from the many antioxidants found within FP. The influential potential electron donors or Lewis base antioxidants (pE- < pH+) in FP preserve cis omega 3, 6, and 9 from instantly jumping into their deadly trans-forms. In addition, FP is bottled in tinted glass because mere sunlight triggers wholesome cis-omegas packed in nine other antioxidants to mouse-trap-change into trans-omegas, much like their explosive triple-bond counterparts. MAR contains zero cis omegas and zero antioxidants after pesti-cides exposure [1], being blasted with harmful extraction solvents [2], heat [3], pressure [4], and bleaching temperatures [5], into noxious partially or fully executed trans-omegas. Also, highly acidic MAR bottles in transparent or translucent Bisphenol A (a known pro-oxidant) containing plastic bottles may leech pro-oxidant toxins into MAR. Very dark-colored pesticide and solvent residue containing MAR is heated to high temperatures and pressured and later bleached to a more enticing amber color. There is much more subtle biophysics to...
acid during chewing. 'The milder sunlight influenced raw and minimally processed food and drink are heated (i.e., ranch chips), the more it becomes an electron grabbing Lewis acid or antioxidant overdose mnemonic pE- < pH+. And the recognition that redox biophys at proton (H+) status at the end of potential electron or potential energy (pE-) transfer detailed to dynamic longevity. ' There are three resultants from previously complicated to convey redox healthful electron donor antioxidant Lewis base (pE- < pH+), helping to pave the long road products, ALEs, melanoidins, and AGEs. In comparison, never previously heated FP is more of a some of highly electron-accepting pro-oxidant Lewis acid (pE- > pH+), helping to pave the long road.

A PubMed search exhibited no previous studies regarding the human consumption of raw and reheated MAR. It's in vivo influence on lipoproteins, thyroid function, redox biophysics, inflammation, immune integrity, and potential to host symptomatic COVID-19 sepsis and symptomatic sepsis from its variants.

The purpose of this pilot single case study is to try the feasibility of a more considerable inquiry deciding the influence or lack of effects of MARs in vivo footprint on lipoproteins, thyroid function, redox biophysics, inflammation, immune integrity, and the potential to host symptomatic COVID-19 sepsis and its variants.

**Methods**

The subject met all inclusion criteria and gave a lipid panel and TSH blood sample before starting the day's food challenge. The first challenge consisted of raw MAR and first pressed olive oil (FP) in mashed sweet potato and green alkaline shake, followed by MAR and FP baked in green alkaline hummus. MAR challenges three and four were FP fried lima beans and MAR and FP previously fried salmon oil baked in green hummus. The last two challenges were once fried sweet potato oil baked in green hummus and fast-food white potatoes fried in MAR.

**Results**

Challenges produced evidence suggesting MAR is associated with chronic disease, not longevity in the subject studied. MAR's 19% increase in TG and VLDL in the first challenge firmly suggests MAR contributed to subclinical atherosclerosis, diabetes, renal insufficiency, atrial fibrillation, stroke, neuronal damage, overweight, cognitive dysfunction, and increased risk of hosting COVID-19 in the subject studied. MAR's 29% increase in Thyroid Function (TF) reflected MAR's ability to surge systemic oxidative stress (SOS: pE- > pH+) and exercise a powerful influence on thyroid hormone and cellular and organ damage.

MAR increased overeating and the glycomic index of starchy foods consumed by the subject. Also, MAR was associated with potential and subclinical metabolic syndrome, premature aging, and the top causes of preventable early death in the person studied. The remaining five MAR challenges detailed herein also led to redox changes towards disease and an increased risk for hosting COVID-19 in the person examined.

**Raw MAR and FP in Mashed Sweet Potato and Green Shake Challenge**

The raw MAR and FP results in mashed alkaline green shake and sweet potato are in Table 1.

The much more readily recognized potential proton or positive hydrogen cation is pH+.

The TG/HDL Ratio is an accepted measure of redox imbalance [17, 20]. The MAR food challenge increased systemic oxidative stress (SOS: pE- > pH+), immune dysfunction, and risk for symptomatic COVID-19 by 19% in the person studied. There was no change in redox, immune, and symptomatic COVID-19 risk status after the FP challenge.

Components of the lipid panel and TSH values are probable indicators of redox and immune system imbalance and probable indicators of risk for hosting symptomatic COVID-19. Here the MAR lipid panel and TSH results reflect the greater increase in TG/HDL ratio compared to the FP food challenge. Future studies may validate lipid panel members and TSH as measures of redox imbalance.

**Table 1.** Raw Maillard ALEs/AGEs rapeseed oil (MAR) & first pressed organic olive oil (FP) in mashed sweet potato & alkaline green shake.

<table>
<thead>
<tr>
<th>Measure</th>
<th>MAR Food Challenge</th>
<th>FP Food Challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHOL 100-199 mg/dL</td>
<td>154</td>
<td>63</td>
</tr>
<tr>
<td>TG 0-149 mg/dL</td>
<td>48</td>
<td>13</td>
</tr>
<tr>
<td>HDL &gt;39 mg/dL</td>
<td>1.3</td>
<td>13</td>
</tr>
<tr>
<td>TG/HDL Ratio Established Redox Measure</td>
<td>5-40 mg/dL</td>
<td>95</td>
</tr>
<tr>
<td>VLDL 0-89 mg/dL</td>
<td>TF -20%</td>
<td></td>
</tr>
<tr>
<td>LDL 0-89 mg/dL</td>
<td>78</td>
<td>49</td>
</tr>
<tr>
<td>TSH 0.45-4.50</td>
<td>1.6</td>
<td>16</td>
</tr>
<tr>
<td>TF = Thyroid Function</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Before Raw MAR in Mashed Sweet Potato & Green Shake**

**Before Raw FP in Mashed Sweet Potato & Green Shake**

**Before Raw FP in Mashed Sweet Potato & Green Shake**

**Morning after Raw FP in Mashed Sweet Potato & Green Shake**

**Table 2.** EnzymeLinked Immunosorbent Assay (ELISA) cytokine analysis in sweet potato oil, marinated & green shake.

Minimal post-absorption changes occurred in MAR/FP CHOL

MAR >1%FP +2%, HDL MAR >2%FP +4%, and LDL MAR. 2%FP +4%. The 2% reduc-
duction in MAR LDL by MAR is consistent with similar assays herein and in companion ar-
ticles. MAR reduced LDL secondary to SOS-based (PE > pH+) heterolotrophic LDL specific immu-
nity and inflammatory pathogenesis [7]. And a hyperthyroid reduction in LDL second-
ary to augmented LDL catabolism [8].

In addition, MAR decreased LDL because of its dominating, highly acidic SOS-based (PE > pH+) aftershock. Previously stated LDL reduction was due to MAR-induced subclin-
ical immunity anomalies and hyperthyroidism [Thyroid Function (TF) >29%] lasting more than 24 hours. Coupled with SOS (PE > pH+)–promoted inflammation the total side effect (TSE) score of 36 represents a debilitating high price to pay for a 2 LDL mg/dL/day decline.

Finally, reduced LDL by catabolizing SOS (PE > pH+), immune, inflammatory, and hy-
perthyroid responses increased potential COVID-19 risk. Changes in LDL and TSH consti-
tuted the first tangible evidence that MAR is associated with chronic disease, not longevity, in the subject studied.

Consequently, a folie a beaoup (folly or madness by many) LDL-reduction may have unfolded crediting the greater consumption of MAR fried, stir-fried, and sauteed fish and chicken. The illusion may also continue with the Maillard abuse disorder pandemic masked as cardiovascular disease, the current top killer in the world. If replicated, public health and epidemiology statisticians can more accurately tabulate the more longevity-friendly preven-
tion and treatment plan diagnosis of Maillard Abuse Disorder, cardiovascular expression.

Triglyceride (TG) data was extremely telling regarding MAR's exogenous (Ex) sweet pota-
tato starch or 'plant fat' (raw glycemic index of 50 and pH of 9) to endogenous TG +19%, with matching VLDL of +19% according to the VLDL, equals about 1/5 of the TG7. The increase

Increased VLDL is associated with atrial fibrillation [9] and stroke. MAR's 19% increase in TG and VLDL firmly stands testimony to MAR's contribution to potential atherosclerosis, diabetes, renal insufficiency [10], atrial fibrillation [11], stroke, neuronal damage [12], over-
weight, cognitive dysfunction, and increased risk of hosting COVID-19 in the person studied.

The third and most incriminating finding within this MAR food challenge is the 29% in-
crease in Thyroid Function (TF), reflecting MARS-skystocking SOS (PE > pH+) properties. MAR

containing melanoidins, ALEs, AGEs, high glycemic index starch and sugars, TG, and VLDL exercised a powerful potential influence on cellular and organ damage and thyroid hormone [13]. MAR may be silently contributing to or causing a litan

y of autoimmune disor-
ders including those associated with the thyroid gland.

It is timely to note that the glycemic index enthusiasm of the past stated that the gly-
cemic index of sugars, starches, and carbohydrates decreases in the presence of oil. MAR

increased the glycemic index of sweet potato as reflected in the 19% higher TG and VLDL levels associated with potential thyroid disease, diabetes, liver disease, kidney malfunction, overweight, increased risk for hosting symptomatic COVID-19 sequelae, accelerated aging, and premature expiration.

The fourth and most disturbing finding within this MAR challenge is the Total Side Ef-
fect (TSE) score of 36. TSE is also a probable marker for increased SOS (PE > pH+), systemic reduc-
tive stress (SRS: pE < pH+), inflammation, and altered immune and thyroid responses. Perceived signs and symptoms comprised the TSE 0:10 score. And included calf discomfort +2, fear of dying +2, frontal headache +4, heartbeat +4, indigestion +3, anxiety +3, left front-
tal numbing +2, perceived irregular heartbeat, and pulse twice (+5 each time), TMJ pain +5, and tongue tip numbing +1.

Increased TSE score and neurological signaling suggest a link between MAR and tissue and cell damage. And cell apoptosis, cell death secondary to augmented endoplasmic reticu-

lum stress, and the primary pathway to neuronal damage [12] and other organ dysfunctions.

A fascinating discussion in greater scope and depth in a companion article, is that AGE-receptor (RAGE) antibodies [18], can decrease AGEs-induced SOS (PE > pH+) cortical imperfection by subdued RAGEs. The presence of AGE-receptor (RAGE) antibodies is tangible evidence for a Type III immune complex-mediated hyperactivity to Maillard end-products and MAR.

First pressed olive oil translated sweet potato carbohydrate, starch, or plant fat into TG +5% and VLDL +6% and similarly relatively mild changes in CHOL +2% and LDL +4%. Thy-
roid function decreased by 20%, along with HDL -4%, because of transient systemic reduc-
tive stress (SRS: pE < pH+), mismatched pH+ nine green shake, alkaline pH+ eight sweet potatoes, and FP antioxidant overload. The decreased availability of pE+ and overabundance of protons pH+ slows thyroid function for as long as 24 hours.

Under standard pE+ pH+ culinary medicine practices, euthyroid would have resulted from vegans adding more acidic minimally dried and pre-soaked in filtered water, raw wal-
nut/cashew/pumpkin seed/sunflower seed-cream sauce, minimally melanoidin-coated meat, fish, or 7 minute soft boiled eggs to the alkaline mashed orange potatoes.

For more than forty years, diets following the popular calories in calories out mantra and trusted lower-calorie MAR appeared to be a clever way to live long and prosper. This raw MAR challenge showed the opposite in the subject studied. It suggests that unheated MAR potentially increases overeating, the glycemic index of carbohydrates and sugars, alters thyroid, anti-inflammatory, and immune function, facilitates metabolic syndrome, and over-
weight in the participant studied.

This data also challenges today's top three causes of death as inaccurate, generating in-
effective prevention and treatment plans worldwide. The author maintains that the top three killers in the world are Maillard, Alcohol, and Nicotine Abuse Disorders. Maillard Abuse Disorder (MAD), alcohol, and nicotine abuse disorder are the three most common causes of SOS (PE > pH+).

Medical specialists may naively cling to their specialty-specific signs and symptoms while drafting, off-point prevention and treatment plans. Cardiologists are among the top culprits of missing the SOS (PE > pH+) forest for their specialty trees and developing ineffec-
tive treatment plans for the wrong diagnosis.

If replicated, PE = pH+ international culinary medicine and dynamic longevity lifestyles becomes the beacon for clinicians in all specialties to make the correct diagnosis for the best treatment plan outcome, Mixed Substance Abuse: cardiovascular expression, and the like.

Also, if replicated, all clinical specialists should recognize that raw MAR consumption increases the risk of hosting symptomatic septic COVID-19 sequela, which underscores the importance of obtaining a comprehensive lifestyle evaluation and 24 hour nourishment di-
available in future articles.

MAR and FP Baked in Green Hummus Challenge

The results for MAR and FP baked in green hummus appear in Table 2.

<table>
<thead>
<tr>
<th>MAR and FP Baked in Green Hummus Challenge</th>
<th>CHOL</th>
<th>TG</th>
<th>HDL</th>
<th>TSE</th>
<th>LDL</th>
<th>VLDL</th>
<th>TSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before Baked MAR in Green Hummus</td>
<td>175</td>
<td>102</td>
<td>52</td>
<td>2.0</td>
<td>20</td>
<td>103</td>
<td>3.23</td>
</tr>
<tr>
<td>Morning after Baked MAR in Green Hummus</td>
<td>165</td>
<td>90</td>
<td>-12%</td>
<td>1.9</td>
<td>18</td>
<td>-10%</td>
<td>100</td>
</tr>
<tr>
<td>Before Baked FP in Green Hummus</td>
<td>147</td>
<td>82</td>
<td>49</td>
<td>1.7</td>
<td>16</td>
<td>82</td>
<td>3.29</td>
</tr>
<tr>
<td>Morning after Baked FP in Green Hummus</td>
<td>142</td>
<td>68</td>
<td>-17%</td>
<td>1.3</td>
<td>14</td>
<td>-12%</td>
<td>76</td>
</tr>
</tbody>
</table>

Table 2: MAR & FP baked in green hummus.

The MAR food challenge temporarily increased systemic oxidative stress (SOS: PE > pH+), immune dysfunction, and risk for symptomatic COVID-19 because of a TSE score of 34 compared to FP's TSE score of 4. The unchanged TG/HDL ratio suggested that MAR's increase in SOS (PE > pH+) returned to normal by the next morning's blood draw. This sug-
gests there was an approximately six-to-ten-hour change in redox, immune, and symptomatic COVID-19 risk status after the MAR food challenge.

Minimally-melanoidin-baked MAR-green hummus lipoprotein and TSH values are ir-
versely related to previous raw MAR in mashed sweet potato and green shake. Findings included the following series of drops: CHOL -6%, TG -12%, HDL -10%, and VLDL -10%. Thyroid function was decreased by 14% due to the prevailing pH+ -rich lower energy SRS (PE > pH+). LDL decreased by 7%.

Raw MAR in mashed sweet potato and green shake's 19% higher TG, 19% higher VLDL, and 28% elevation in TF findings (Table 1) were less prominent in the sweet potato-free and lowered reactive oxygen species, high alkaline green hummus environment (PE > pH+). More redox balanced Table 2 findings were brought about by binding much of the warmer electron grabbing Lewis acidic MAR to the warmer electron-donating Lewis base lima bean and lowered reactive oxygen species, high alkaline green hummus environment (PE > pH+).

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The baked MAR-green hummus triggered sufficient inflammatory, immunological, and neurological redox signaling to launch a TSE score of 34. Total side effect score components included auricular tingling +2, blood pressure as high as 166 mmHg/110 mmHg, blurred vision +3, diaphoresis +2, fear +2, and frontal headache +3. Additional signs and symptoms of redox imbalance included heart palpitations +2, heart tingling +2, and intermittent lethargy +2. [Total Creatine Kinase] 170 10 U/L (Normal=17 200 U/L). Also present was left-hemisphericic pressure +2, left supraorbital numbness +2, pulse as high as 94 bpm +1, right carpal tunnel discomfort +2, shortness of breath +2, startling response +3, tinnitus +2, and unsteady gait +2.

Baked FP green hummus exhibited the identical relationship regarding lipid panel and TF values as MAR green hummus in an SRS (pE < pH) fashion because of the greater abundance of alkaline antioxidants in FP green hummus and more modest redox signaling TSE score of 4 (heartburn +2, heart palpitations +1, and tinnitus +1). Also, the addition of blended minimally heated seeds or nuts for the FP green hummus as an abundant sauce on minimally melanoidin-coated meat or fish and one green vegetable side would have better equilibrated into prime systemic energy (PSE: pE = pH), immune support, and COVID-sepsis prevention.

If replicated, raw and heated MAR results thus far suggest avoiding MAR in its unheated or minimally heated form if the goal is optimal prime systemic energy (PSE: pE = pH), immune feedback, protection from COVID-sepsis, and living to be a dynamic supercentenarian.

### MAR and FP Fried Lima Bean Challenge

Fresh-frozen lime beans were fried in MAR and FP until transformed into melanoidin-coated brown chips (Table 3).

| Table 3: Lima beans fried in MAR & FP until melanoidin-coated brown chips. |
|--------------------------|------------------|----------------|-----------------|----------------|----------------|----------------|
|                          | CHOL 100-199 mg/dL | TG 0-149 mg/dL | HDL >39 mg/dL   | TG/HDL Ratio   | LDL 50-40 mg/dL | TSH 0.45-5.50|
| Before Lima Bean Chips Fried in MAR | 165 | 90 | 47 | 1.9 | 18 | 100 |
| Morning after Lima Bean Chips Fried in MAR | 157 | -5% | 82 | -9% | 45 | -4% | 1.8 | -5% | 16 | -11% | 96 | -4% |
| Before Lima Bean Chips Fried in FP | 142 | 68 | 52 | 1.3 | 14 | 76 |
| Morning after Lima Bean Chips Fried in FP | 150 | +5% | 122 | +56% | 44 | -15% | 2.8 | +54% | 24 | +42% | 82 | +7% |
| TF = Thyroid Function | 3.45 | +9% |

If replicated, FP should bear black box warnings about not exceeding moist 100°C until very significantly increased appetite or hunger. It is characterized by albeit softer signs and symptoms of opioid and cannabinoid withdrawal. Other symptoms of withdrawal include a grab-and-go snack, appetite, mindful images of a subsequent meal or snack, augmented food craving, and hunger. Accompanying side effects were indigestion +5, insomnia +7, intermittent dry cough +2, heartburn +1, and heart palpitations +2. Also present were left lateral frontal oral pressure +4, left radial nerve distribution neurolgia +2, right hemiplegic twitch +1, right tinnitus +3, shooting +6 electrical sensations in the right-radial nerve distribution, tinnitus +1, TMJ pain +4, tongue tip numbness +3, and upper abdominal pressure +2.

Fried MAR-lima bean chips decreased CHOL -5%, TG-9%, HDL -4%, LDL -11%, and LDL -4% . Lima beans fried in MAR increased Thyroid Function (TF) by 19% and suggests increased SOS (pE > pH) catabolic mechanisms reducing lipoprotein levels as described earlier. Fried MAR-lima bean chips had 40% more TSEs (81) than FP bean chips (49).

If repeated, highly processed browned bread crust, melanoidin coatings on other baked or fried botanicals, and chips made with MAR should have black box warnings.

Also, if repeat studies agree, abstinence from botanical melanoidin-coated fried and baked chips and analogously processed snacks and foods should be integral in all COVID-19 prevention and treatment plans.

Most importantly, if repeated, the prior quote about Maillard coated chips and elevated TSE scores reflecting the setting off a COVID-19 sepsis-facilitating cytokine cascade [14], warrants black box warnings on chips and the like. And age-identification before the purchase in which appears to be forthcoming decades more of casualties from immunosuppressed-hosted Severe Acute Respiratory Syndrome (SARS) and SARS-like illnesses.

If repeated, lifestyle changes may prove superior COVID-19 prevention measures than mask-wearing, social distancing, shelter-in-place, vaccines, and vaccine boosters combined.

### MAR and FP Previously Fried Salmon Oil Baked in Green Hummus Challenge

MAR salmon-oil in green hummus produced a mixed SOS (pE > pH) toxic outcome consisting of TF +26%, redox imbalanced catabolic CHOL -8%, TG -18%, LDL -12%, and LDL -11% values with a relatively safe TSE score of 8.

Salmon oil in green hummus produced a healthier prime systemic energy (PSE: pE < pH) via the zoological/alkaline botanical chelated CHOL -3%/day, TG -18%/day, LDL -4%day, LDL -4%day, and TF +1%/day within a TSE profile of 12. Hence, the previously mentioned advice to drink a mug of fresh juiced carrots and celery followed by a mug of lime bean/FP shake is culinary medicine before and after consuming favorite Maillard-toxic meals.

**MAR salmon-oil, analogous to fries used to fry meats and then potato fries, produced a more toxic thyroid effect and increased risk for symptomatic COVID-19 and its variants, suggested by a TF increase of 26%.”**
MAR and FP Previously Fried Sweet Potato Oil Baked in Green Hummus Challenge

MAR and FP, previously used for frying sweet potato, were baked within green hummus (Table 5).

Table 5: MAR & FP, previously used for frying salmon baked within green hummus.

<table>
<thead>
<tr>
<th>Measure</th>
<th>CHOL 100-199 mg/dL</th>
<th>TG 0.149 mg/dL</th>
<th>HDL &gt;39 mg/dL</th>
<th>TG/HDL Ratio Established Redox Measure</th>
<th>VLDL 5.40 mg/dL</th>
<th>LDL 0.99 pE = pH+ 50-99 mg/dL</th>
<th>TSH 0.45-4.50 pE = pH+ 1.8-3.15 mg/dL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before Sweet Potato MAR in Green Hummus</td>
<td>146</td>
<td>69</td>
<td>46</td>
<td>1.4</td>
<td>14</td>
<td>83</td>
<td>+2%</td>
</tr>
<tr>
<td>Morning after Sweet Potato MAR in Green Hummus</td>
<td>146</td>
<td>+1%</td>
<td>69</td>
<td>49</td>
<td>+6%</td>
<td>1.4</td>
<td>-6%</td>
</tr>
<tr>
<td>Before Sweet Potato FP in Green Hummus</td>
<td>146</td>
<td>100</td>
<td>47</td>
<td>2.1</td>
<td>20</td>
<td>79</td>
<td>3.40</td>
</tr>
<tr>
<td>Morning after Sweet Potato FP in Green Hummus</td>
<td>157</td>
<td>+7%</td>
<td>69</td>
<td>49</td>
<td>+4%</td>
<td>1.4</td>
<td>-3%</td>
</tr>
</tbody>
</table>

The 33% TG/HDL ratio associated with FP food challenge, lower TSE score of 22 and TF value of +13% made this FP challenge wellness-superior to the MAR food challenge.

Conclusion

Highly habit-forming Maillard end-products lead to tissue and cell damage, cell apoptosis, and cell death secondary to augmented endoplasmic reticulum stress, leading to neuronal damage and many other common public health maladies including heart disease, stroke, cancer, COVID-19 sepsis, T2 diabetes, and Alzheimers.

More considerable investigation is warranted to analyze the influence or lack of effects of MAR on in vivo lipoproteins, thyroid function, redox biology, inflammation, immune integrity, and potential to host symptomatic COVID-19 sepsis and sepsis secondary to its variants.

COVID-19 and its variants are here to stay within our collective nasopharynx. Masks and vaccines are not likely to substitute for immune strength fostered by a pE international culinary medicine and dynamic longevity lifestyle.

Conflict of interest statement

The author has no conflicts to disclose.

Dedication

This article's dedication is to Stephanie. Many apologies for all those Maillard-coated chippy-store stops we made on the way to Green Pond. Chip-overdose probably helped trig- ger the severe panic attack you once had while out on the Northern New Jersey pond.

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References


