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| **Supplemental Table 1**: Reason for exclusion of retrieved articles | |
| References | Reason for exclusion |
| 1. Marchand, N., et al. (2019). "A healthy plant-rich diet and the risk of rheumatoid arthritis in women." Arthritis and Rheumatology **71**: 289-290. | No relevant exposure reported |
| 1. Prescha, A., et al. (2018). "Diet quality and its relationship with antioxidant status in patients with rheumatoid arthritis." Oxidative Medicine and Cellular Longevity **2018**. | No relevant outcome reported |
| 1. Malaviya, A. N. (2017). "Methotrexate intolerance in the treatment of rheumatoid arthritis (RA): effect of adding caffeine to the management regimen." Clinical Rheumatology **36**(2): 279-285. | No relevant outcome reported |
| 1. Macejová, Ž. and M. Macej (2011). "Epidemiology of rheumatoid arthritis - Risk factors, incidence, prevalence, duration of disease." Rheumatologia **25**(2): 85-89. | Review |
| 1. Kunsch, C., et al. (2005). "Oxidative stress and the use of antioxidants for the treatment of rheumatoid arthritis." Current Medicinal Chemistry: Immunology, Endocrine and Metabolic Agents **5**(3): 249-258. | Review |
| 1. Bae, S. C. and Y. H. Lee (2018). "Coffee consumption and the risk of rheumatoid arthritis and systemic lupus erythematosus: a Mendelian randomization study." Clinical Rheumatology **37**(10): 2875-2879. | Irrelevant study design |
| 1. Mosalmanzadeh, N., et al. (2020). "Major dietary patterns and food groups in relation to rheumatoid arthritis in newly diagnosed patients." Food Science and Nutrition. | Irrelevant study design |
| 1. Li, J., et al. (2019). "The association of tea consumption with the disease activity of rheumatoid arthritis." European Journal of Immunology **49**: 926. | Irrelevant study design |
| 1. Rambod, M., et al. (2018). "The impact of dietary habits on the pathogenesis of rheumatoid arthritis: a case-control study." Clinical Rheumatology **37**(10): 2643-2648. | Irrelevant study design |
| 1. Chamizo-Carmona, E., et al. (2017). "The effect of smoking, alcohol and caffeine on early rheumatoid arthritis outcomes." Annals of the Rheumatic Diseases **76**: 1121-1122. | Irrelevant study design |
| 1. Yoshimura, H., et al. (2019). "Differences of lifestyle habits of smoking, drinking alcohol and caffeinated coffee consumption between rheumatoid arthritis patients and healthy control-tomorrow study." Annals of the Rheumatic Diseases **78**: 645. | Irrelevant study design |

**Supplementary Table 2**. Scoring for the different components of NutriGrade for each outcome.

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| **Exposure** | **Outcome** | **Risk of bias**1 | **Precision**2 | **Heterogeneity**3 | **Directness**4 | **Publication bias**5 | **Funding bias**6 | **Effect size**7 | **Dose-response**8 | **Sum** | **NutriGrade** |
| Coffee | RA | 2 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 6 | Moderate |
| Caffeinated coffee | RA | 2 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 4 | Low |
| De-caffeinated coffee | RA | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 5 | Moderate |
| Tea | RA | 2 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 4 | Low |
| Caffeine | RA | 2 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 4 | Low |
| 1 Modifications of original NutriGrade-scoring system: Study quality Newcastle Ottawa Scale: ≥8 (2 points); ≥7-<8 (1.5 points), ≥6-<7(1 point).  2 >5000 cases and the 95%CI excludes the null value (1 point), <5000 cases or >5000 cases but 95%CI includes the null value (0 point).  3 0 to 1 point on the basis of *I*2.  4 No important differences in the population or hard clinical outcomes (1 point), important differences in the population (0 point).  5 <5 studies or sever evidence of bias or publication bias not assessed (0 point), no evidence of bias for 5-9 studies or moderate evidence of bias for ≥10 studies (0.5 point), no evidence of bias for ≥10 studies (1 point).  6 Funded by academic institutions or research institutions (1 point), funded by private institutions, foundations, or nongovernmental organizations (0.5 point), Industry funding or conflict of interest (0 point).  7 No effect (RR: 0.80–1.20) when comparing the highest vs. lowest category (0 point), moderate effect size (RR: <0.80–0.50 and >1.20–2, and corresponding test is statistically significant) when comparing the highest vs. lowest category (1 point), large effect size (RR: <0.50 and >2.00, and corresponding test is statistically significant) when comparing the highest vs. lowest category (2 point).  8 No dose-response analysis or dose-response analysis with corresponding statistical test no significant (0 point), significant linear or nonlinear dose-response relationship (1 point). | | | | | | | | | | | |