

Supplementary table 1. Quality assessment of included studies.

Criterion	1	2	3a	3b	4	5	6	7a	7b	8	9	10	11	12	13	14	15	16	17
Study (Reference)																			
Abbou., et al (52)	✓	✗	✓	✗	✗	✓	✗	✗	✓	✗	✓	✗	✗	✗	✓	✗	✗	✗	✗
Akyuz., et al (23)	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Adefegha., et al (22)	✓	✓	✓	✗	✓	✓	✓	✗	✗	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓
Ahmed., et al (31)	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓
Arise., et al (16)	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✗	✓	✓	✗	✓
Attaallah., et al (24)	✓	✗	✗	✓	✓	✓	✗	✓	✓	✗	✓	✗	✗	✗	✓	✓	✓	✗	✗
Benmohamed., et al (32)	✓	✗	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✗	✓	✓	✓	✗	✗
Boudiba., et al (25)	✓	✓	✓	✗	✗	✗	✓	✗	✗	✗	✗	✗	✓	✓	✗	✓	✓	✗	✗
Bourais., et al (26)	✓	✓	✓	✓	✓	✓	✗	✓	✗	✓	✓	✗	✓	✓	✓	✓	✓	✗	✓
Erukainure., et al (33)	✓	✓	✓	✗	✗	✗	✗	✗	✗	✓	✗	✗	✓	✗	✗	✓	✓	✗	✓
Feng., et al (27)	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓

Göksu., et al (28)	✓	✓	✓	✓	✓	✓	✗	✓	✗	✗	✓	✓	✓	✓	✓	✗	✓	✗	✓
Guici., et al (29)	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✗	✓	✓	✗	✗
Kumar., et al (53)	✓	✗	✗	✗	✗	✓	✗	✗	✗	✗	✓	✓	✓	✗	✓	✗	✗	✗	✗
Loizzo., et al (34)	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✗	✓	✓	✗	✓
Liu., et al (35)	✓	✗	✓	✓	✓	✗	✓	✗	✗	✗	✗	✗	✗	✓	✗	✗	✓	✗	✗
Noguera-Artiaga., et al 2018 (36)	✓	✓	✓	✓	✓	✗	✓	✗	✗	✗	✗	✗	✗	✓	✗	✓	✓	✗	✗
Noguera-Artiaga., et al 2019 (37)	✗	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✓	✗	✗
Oboh., et al (38)	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓
Pino Ramos., et al (39)	✓	✓	✓	✓	✓	✗	✓	✗	✗	✓	✗	✗	✓	✗	✗	✗	✓	✗	✗
Subbiah., et al (40)	✓	✗	✓	✗	✗	✗	✗	✗	✓	✓	✓	✗	✓	✗	✓	✗	✗	✗	✗
Sut., et al (41)	✓	✓	✓	✗	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✗	✗	✓	✗	✗
Tsujita., et al 2013 (42)	✓	✓	✓	✗	✓	✗	✓	✗	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✗

Tsujita., et al 2008a (43)	✓	✗	✓	✗	✓	✗	✓	✗	✗	✓	✗	✗	✗	✗	✗	✓	✓	✗	✗
Tsujita., et al 2008b (44)	✓	✗	✓	✗	✓	✗	✓	✗	✓	✗	✓	✗	✗	✓	✓	✗	✓	✗	✓
Tsujita., et al 2011 (45)	✓	✓	✓	✗	✓	✗	✓	✗	✓	✓	✓	✗	✓	✓	✓	✓	✓	✗	✗
Vazquez-Flores., et al (46)	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✗	✗	✓	✗	✓	✓	✗	✓
Wang., et al (47)	✗	✓	✓	✗	✓	✓	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✗	✓
Wojdyło., et al (48)	✓	✓	✓	✗	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✗	✗	✓	✗	✗
Zhang., et al (50)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓
Zulfqar., et al (49)	✓	✓	✓	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✗	✓

Criteria Group I: Test substance identification
1 - Is the test substance identified (name and part of nuts)?
2 - Was the composition/purity of the test substance assessed and provided (e.g. including phytochemical analysis)?
3 - Has information on the source/origin of the substance/chemicals been provided? a) Nut supplier/origin b) Everything else (except the enzyme, which is assessed by criterion 6)
4 - Has all information on the extraction method of the test substance (e.g. solvent, time, temperature) been provided?
Criteria Group II: Test system characterisation
5 - Is the test system clearly described (including enzyme assay buffer, pH, incubation time and temperature)?
6 - Is information given on the source/origin of the test system i.e. the type and source of enzyme?
7 - Has the necessary information on the test system properties been provided? a) Amount/concentration of enzyme b) Concentration of substrate and any controls
Criteria Group III: Study design description
8 - Is the concentration range of tested inhibitors given? (Note, IC ₅₀ values without an investigated range are not sufficient)
9 - Was the enzyme assay sufficiently stopped at the end of the incubation and prior to endpoint measurement?
10 - Were negative controls included? (Note, since all studies must have used an inhibitor-free control to obtain IC ₅₀ or inhibition%, only the inclusion of substrate-free and enzyme-free controls were assessed)
11 - Were positive controls (i.e. a known inhibitor such as acarbose) provided?
12 - Is the number of replicates provided?
Criteria Group IV: Study results documentation
13 - Are the study endpoints and method used to calculate enzyme activity/inhibition (e.g. DNSA, hexokinase etc) provided?
14 - Are the results on all endpoints that have been mentioned in the methods clearly described (e.g. controls, blank-correcting, etc.)?
15 - Have statistical analyses been clearly described?
Criteria Group V: Plausibility of study design and results
16 - Is the study design adequate and suitable to detect the anticipated effects (e.g. the chosen test system, number of replicates, number and range of test inhibitor concentrations, appropriate controls including the measurement/consideration of endogenous sugars, inclusion of all relevant results)?
17 - Are quantitative results reliable (e.g. observed variation of the results and controls are acceptable and within a reasonable range) and calculated and presented appropriately?