

Assessment of each systematic review by the AMSTAR tool

AMSTAR Vitamin D	<i>Omid Asbaghia (2019)</i>	<i>Sheila A. FisherID (2019)</i>	<i>Mingming Wanga (2019)</i>	<i>Yanting Yu (2017)</i>	<i>Mohsen Mazidi (2018)</i>	<i>EK Calton (2018)</i>	<i>Tari Agbalalah (2017)</i>	<i>Małgorzata Jamka (2015)</i>	<i>Neng Chen (2014)</i>
<i>1.A-priori design</i>	Yes	Yes	Yes	No	Yes	Yes	ND	Yes	ND
<i>2.Duplicate study selection and data extraction</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>3.Comprehensive literature review</i>	Yes	Yes	Yes	Yes	ND	Yes	Yes	Yes	Yes
<i>4.Unpublished grey reports Sought*</i>	No	No	No	Yes	ND	ND	ND	Yes	Yes
<i>5.List of included and excluded studies provided</i>	No	No	No	No	NO	No	NO	No	No
<i>6.Characteristics of individual studies provided</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>7.Scientific quality of studies assessed and documented*</i>	No	No	No	Yes	ND	No	No	No	Yes
<i>8.Scientific quality of studies used for conclusions</i>	No	ND	No	Yes	ND	No	No	ND	Yes
<i>9.Statistical method appropriate</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>10.Likelihood of publication bias assessed</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>11.Conflict of interest declared in both systematic review and included studies</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Aggregate score</i>	7/11	7/11	7/11	9/11	5/11	7/11	6/11	8/11	8/11

AMSTAR Vitamin C	<i>Maryam Safa bakhsh (2019)</i>	<i>Sadegh Jafarnejad (2018)</i>	<i>Ammar W. Ashor (2015)</i>	<i>Ammar W. Ashor (2014)</i>
1.A-priori design	Yes	Yes	ND	ND
2.Duplicate study selection and data extraction	Yes	Yes	Yes	Yes
3.Comprehensive literature review	Yes	Yes	Yes	Yes
4.Unpublished grey reports Sought*	No	Yes	No	No
5.List of included and excluded studies provided	No	No	No	No
6.Characteristics of individual studies provided	Yes	Yes	Yes	Yes
7.Scientific quality of studies assessed and documented*	Yes	Yes	Yes	Yes
8.Scientific quality of studies used for conclusions	Yes	Yes	Yes	No
9.Statistical method appropriate	Yes	Yes	Yes	Yes
10.Likelihood of publication bias assessed	Yes	Yes	Yes	Yes
11.Conflict of interest declared in both systematic review and included studies	Yes	Yes	Yes	Yes
Aggregate score	9/11	10/11	8/11	7/11

AMSTAR melatonin	<i>Zarezadeh M (2019)</i>	<i>Akbari M (2018)</i>
<i>1.A-priori design</i>	Yes	Yes
<i>2.Duplicate study selection and data extraction</i>	Yes	Yes
<i>3.Comprehensive literature review</i>	Yes	Yes
<i>4.Unpublished grey reports sought</i>	No	No
<i>5.List of included and excluded studies provided</i>	No	No
<i>6.Characteristics of individual studies provided</i>	Yes	Yes
<i>7.Scientific quality of studies assessed and documented*</i>	No	Yes
<i>8.Scientific quality of studies used for conclusions</i>	Yes	Yes
<i>9.Statistical method appropriate</i>	Yes	Yes
<i>10.Likelihood of publication bias assessed</i>	Yes	Yes
<i>11.Conflict of interest declared in both systematic review and included studies</i>	Yes	Yes
<i>Aggregate score</i>	8/11	9/11

AMSTAR zinc	<i>Mousavi SM (2018)</i>
<i>1.A-priori design</i>	ND
<i>2.Duplicate study selection and data extraction</i>	Yes
<i>3.Comprehensive literature review</i>	Yes
<i>4.Unpublished grey reports sought</i>	No
<i>5.List of included and excluded studies provided</i>	No
<i>6.Characteristics of individual studies provided</i>	Yes
<i>7.Scientific quality of studies assessed and documented*</i>	No
<i>8.Scientific quality of studies used for conclusions</i>	Yes
<i>9.Statistical method appropriate</i>	Yes
<i>10.Likelihood of publication bias assessed</i>	
<i>11.Conflict of interest declared in both systematic review and included studies</i>	Yes
<i>Aggregate score</i>	6/11