**Table S3.** Total salivary antioxidant capacity in the oral cavity of caries-free and caries-affected individuals

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| **Study (year)** | **Country** | **Participants (n)****[Age; mean ± sd]** | **Criteria for caries diagnosis** | **Caries experience** | **Clinical sample** | **Method** | **Results** | **Quality** |
| Ahmadi-Motamayel et al.(2013a) | Iran | Caries-free (50)[15-17 years-old]Caries active (50)[15-17 years-old] | WHO | Caries-free: DMFT=0Caries active: DS≥5 | Unstimulated saliva (expectoration; morning; 1.5h fasting) | ABTS method | TAC (mmol/L; mean ± sd): Caries-free= 40.74±10.85Caries-active= 50.53±16.69**(p<0.001)** | FAIR |
| Ahmadi-Motamayel et al.(2018) | Iran | Caries-free (56)[15-19 years-old]Caries active (62)[15-19 years-old] | WHO | Caries-free: DMFT=0Caries active: DMFT≥5 | Unstimulated saliva (expectoration; morning) | FRAP assay | TAC (mmol/L; mean ± sd): Caries-free= 0.17 ± 0.01Caries-active= 0.17 ± 0.02(p=0.07) | GOOD |
| Aliakbarpour et al. (2021) | Iran | Caries-free (30)[3-5 years-old]ECC (30)[3-5 years-old]S-ECC (30)[3-5 years-old] | Not informed | Not informed | Unstimulated saliva (morning; 1h fasting and wo. toothbrushing) | TBARS assay | TAC (mmol/L; mean ± sd): Caries-free= 0,000054 ± 0,000029\*ECC= 0,000098 ± 0,000034S-ECC= 0,000109 ± 0,000036**\*(p<0.05)***Calculated (mean±sd) for* *ECC and S-ECCs= 0.0001035±0.0000351* | FAIR |
| Araújo et al.(2020) | Brazil | Caries-free (30)[17.8 ± 4.5 months-old]Early carious lesions (30)[23.6 ± 5:6 months-old]Moderate carious lesions (30)[32.6 ± 4.5 months-old]Advanced carious lesions (30)[35.0 ± 2.8 months-old] | ICCMS | Number of lesions:Caries-free= 0Early carious lesions= 1.93±0.94Mod. carious lesions= 1.83±0.87Adv. carious lesion= 2.57 ± 1.10 | Unstimulated saliva (cotton swab; morning; 2h fasting) | FRAP assay | TAC (umol/L) by mg protein concentration:Adv. Carious lesion group > mod. Carious lesion >early carious lesion = caries-free **(p<0.001)**A positive and strong correlation was observed between caries severity and TAC (Spearman’s r = 0.8425**, p < 0.0001**) | GOOD |
| Banda et al.(2017) | India | Caries-free (30)[7.13 ± 0.86 years-old]Caries (30)[8.03 ± 1.03 years-old] | WHO | Caries-free: D/d=0Caries: D/d > 4 | Unstimulated saliva (spiting; morning; 1h fasting) | Molybdenium method | TAL (mmol/L; mean ± sd): Caries-free= 0.0063±0.02305Caries= 0.1102±0.07101**(p<0.0001)** | GOOD |
| Hedge et al.(2009) | India | Caries-free (25)[4.44±0.58 years-old]ECC (25)[4.36±0.70 years-old]Caries-free (25)[7.80±0.82 years-old]Rampant caries (25)[7.56±1.04 years-old] | WHO | Not informed  | Unstimulated saliva (spiting) | TBARS assay | TAC (mmol/L; mean ± sd): Caries-free= 0.014±0.004 ECC=0.025±0.012**(p<0.001)**Caries-free= 0.022±0.004Rampant caries= 0.046±0.0009**(p<0.001)** | FAIR |

**Table S3 (cont).** Total salivary antioxidant capacity in the oral cavity of caries-free and caries-affected individuals

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| **Study (year)** | **Country** | **Participants (n)****[Age; mean ± sd]** | **Criteria for caries diagnosis** | **Caries experience** | **Clinical sample** | **Method** | **Results** | **Quality** |
| Hedge et al. (2013a) | India | Caries-free (25)[25-50 years-old]Low caries (25)[25-50 years-old]Moderate caries (25)[25-50 years-old]High caries (25)[25-50 years-old] | WHO | Caries-free: DMFT=0Low caries: (0<DMFT<3 Moderate caries: 3<DMFT<10High caries: DMFT>10 | Not clear if unstimulated (drooling) of stimulated (chewing) saliva | Molybdenium method | TAC (mmol/L; mean ± sd): Caries-free= 0.00034 ± 0.00013Low-caries= 0.00044 ± 0.00013Moderate caries= 0.00056 ± 0.00026High caries= 0.00059 ± 0.00018**(p<0.001)***Calculated (mean±sd) for* *Low-moderate-high caries=* *0.000545±0.0002* | FAIR |
| Jurczak et al.(2017) | Poland | Caries-free (27)[3.11 ± 1.19 years-old]Non-cavitated group (26)[2.35 ±1.09 years-old]Extensive decay (26)[3.56 ±1.25 years-old] | ICDAS II | Caries-free: ICDAS II=0Non-cavitated group: 1–2 ICDAS II; 2.35 ± 1.09Extensive decay:5–6 ICDAS II; 3.56 ± 1.25 | Unstimulated saliva (cotton swab; morning; fasting) | FRAP assay | TAC (mmol/L; median; lower-upper quartile):Extensive decay: 1.73 (1.72–1.74)Extensive decay > non-cavitated group > caries-free **(p<0.001)** | GOOD |
| Mahjoub et al.(2014) | Iran | Caries-free (40)[3-5 years-old]S-ECC (40)[3-5 years-old] | WHO | Caries-free? dmfs=0S-ECC: dmfs ≥ 4 | Unstimulated saliva (fasting) | FRAP assay | TAC (mmol/L; mean ± sd):Caries-free= 0.579±0.145S-ECC= 0.647±0.121(**p=0.025)**A positive correlation between salivary TAC and dmfs scores in S-ECC children by Pearson’s correlation test (r = 0.725, **p <** **0.001)** | GOOD |
| Muchandi et al.(2015) | India | Caries-free (25)[3-5 years-old]S-ECC (25)[3-5 years-old] | Not informed | Not informed | Unstimulated saliva (drooling) | TBARS assay | TAC (mmol/L; mean ± sd):Caries-free= 1.08 ± 0.17S-ECC= 1.82 ± 0.19(**p<0.0001)** | FAIR |

**Table S3 (cont).** Total salivary antioxidant capacity in the oral cavity of caries-free and caries-affected individuals

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| **Study (year)** | **Country** | **Participants (n)****[Age; mean ± sd]** | **Criteria for caries diagnosis** | **Caries experience** | **Clinical sample** | **Method** | **Results** | **Quality** |
| Pandey et al.(2015) | India | Caries-free (60)[7-10 years-old (n=30)][11-15 years-old (n=30)]Caries-active (60)[7-10 years-old (n=30)][11-15 years-old (n=30)] | WHO | Caries-free: DMFS=0Caries-active: DMFS/dfs ≥ 5 | Unstimulated saliva (spiting, morning, 2h fasting) | FRAP assay | TAC (mmol/L; mean ± sd):Caries-free:[7-10 years-old]Girls: 0.42±0.08\*Boys: 0.36±0.37\*[11-15 years-old]Girls: 0.46±0.09Boys: 0.38±0.06\* Caries-active:[7-10 years-old]Girls: 0.46±0.10\*Boys: 0.47±0.11\*[11-15 years-old]Girls: 0.40±0.19Boys: 0.48±0.12\* \* **(p<0.05)***Calculated means(male and female)**Caries-free (n=60)**0.40*±0.*10**Caries-active (n=60)**0.45*±*0.12* | GOOD |
| Patel; Pujara(2015) | India | Group ACaries-free (25)[below 71 months-old] ECC (25)[below 71 months-old (25)] Group BCaries-free (25)[from 6-10 years-old]ECC (25)[from 6-10 years-old] | WHO | Group ACaries-free: dft=0; ECC: dft=3.32±1.74; Group BCaries-free: DMFT=0ECC: DMFT= 6.16±0.98 | Unstimulated saliva (expectoration) | Spectrophotometric method | Group ATAC (mmol/L; mean ± sd):Caries-free= 0.014152±0.004246 ECC= 0.025584±0.012123 **p<0.0001**Group BTAC (mmol/L; mean ± sd):Caries-free= 0.02296±0.00476 ECC=0.04612±0.00099 **p<0.0001** | FAIR |

**Table S3 (cont).** Total salivary antioxidant capacity in the oral cavity of caries-free and caries-affected individuals

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| **Study (year)** | **Country** | **Participants (n)****[Age; mean ± sd]** | **Criteria for caries diagnosis** | **Caries experience** | **Clinical sample** | **Method** | **Results** | **Quality** |
| Preethi et al.(2010) | India | Caries-free (60)[7-10 years-old (n=30)11-14 years-old (n=30)]Caries-active (60)[7-10 years-old (n=30)11-14 years-old (n=30)] | WHO | Not informed | Unstimulated saliva (aspiration) | TBARS assay | TAC (mmol/L; mean ± sd):Caries-free:[7-10 years-old]Girls: 0.00016 ± 0.00003\*Boys: 0.00016 ± 0.00005\*\*[11-14 years-old]Girls: 0.00019 ± 0.00004\*\*\*Boys: 0.00019 ± 0.00004\*\*\*\*Caries-active:[7-10 years-old]Girls: 0.00023 ± 0.00005\*Boys: 0.00020 ± 0.00004\*\*[11-14 years-old]Girls: 0.00023 ± 0.00004\*\*\*Boys: 0.00022 ± 0.00004\*\*\*\*\*/\*\*/\*\*\*/\*\*\*\* **(p<0.05)***Calculated means (7-14 years):**Caries-free=0.000175±0.00004199 (n=60); Caries-active=0.00022±0.00004338 (n=60)* | FAIR |
| Pyati et al. (2018) | India | Caries-free (50)[6-12 years-old]Caries-active (50)[6-12 years-old] | WHO | Caries-free: DMFS/dfs=0Caries active: DMFS/dfs=6.26 ± 0.90 | Unstimulated saliva (aspiration; morning; 1h fasting) | TBARS assay | TAC (mmol/L; mean ± sd):Caries-free= 0.35 ± 0.16Caries active= 0.44 ± 0.17 **(p <0.006)** | GOOD |
| Rahmani et al.(2016) | Iran | Caries-free (60)[14-18 years-old]Caries (60)[14-18 years-old] | WHO | Caries-free: DMFT=0Caries: DMFT ≥5 | Unstimulated saliva (drooling; morning; 1.5h fasting) | FRAP assay | TAC (mmol/L; mean ± sd):Caries-free= 0.000396 ± 0.000077Caries= 0.000256 ± 0.000106**(p<0.001)** | GOOD |

**Table S3 (cont).** Total salivary antioxidant capacity in the oral cavity of caries-free and caries-affected individuals

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| **Study (year)** | **Country** | **Participants (n)****[Age; mean ± sd]** | **Criteria for caries diagnosis** | **Caries experience** | **Clinical sample** | **Method** | **Results** | **Quality** |
| Salman et al.(2021) | Iran | Caries-free (84)[3-18 years-old]Caries-active (78)[3-18 years-old] | WHO | Caries-free: Caries index=0Caries active: Caries index=2 | Unstimulated saliva (morning) | TBARS assay | TAC (mmol/L; mean ± sd):Caries-free:[3-12 years-old]0,494 ± 0,229[13-18 years-old]0,675 ± 0,163\*[3-18 years-old]0,541 ± 0,228Caries-active[3-12 years-old]0,520 ± 0,216[13-18 years-old]0,530 ± 0,166\* [3-18 years-old]0,522 ± 0,204**(\*p<0,05)** | FAIR |
| Shaki et al.(2020) | Iran | Caries-free (40)[3-5 years-old]Caries-active (40)[3-5 years-old] | WHO | Caries-free: DMFT=0Caries-active: DMFT ≥5 | Unstimulated saliva (expectoration; morning; 2h fasting) | FRAP asaay | Salivary total antioxidant capacity (FRAP/FeSO4µM) higher in caries active rather than in caries-free**(p<0.05)** | FAIR |
| Silva et al.(2016) | Brazil | Caries-free (30)[0-3 years-old]S-ECC (30)[0-3 years-old] | WHO | Caries-free: dfms=0S-ECC: dmfs= 3.7±3.44 | Unstimulated saliva (expectoration; morning; 2h fasting] | FRAP assay | TAC (mmol/L; mean ± sd):Caries-free= 49.1 ± 23.24S-ECC= 61.5 ± 20.18**(p<0.05)** | GOOD |

**Table S3 (cont).** Total salivary antioxidant capacity in the oral cavity of caries-free and caries-affected individuals

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| **Study (year)** | **Country** | **Participants (n)****[Age; mean ± sd]** | **Criteria for caries diagnosis** | **Caries experience** | **Clinical sample** | **Method** | **Results** | **Quality** |
| Tulunoglu et al.(2006) | Turkey | Caries-free (40)[7-10 years-old (n=20)11-15 years-old (n=20)]Caries-active (40)[7-10 years-old (n=20)11-15 years-old (n=20)] | WHO | Caries-free: DMFT=0Caries-active: DMFT≥5 | Unstimulated saliva (morning; 2h fasting) | ABTS method | TAC (mmol/L; mean ± sd):Caries-free:[7-10 years-old]Girls 0.39 ± 0.08Boys: 0.48 ± 0.20[11-15 years-old]Girls 0.65 ± 0.16Boys: 0.56 ± 0.30Caries-active:[7-10 years-old]Girls: 0.45 ± 0.13Boys: 0.60 ± 0.15[11-15 years-old]Girls: 0.57 ± 0.18Boys: 0.69 ± 0.25(p>0.05)*Calculated means (7-15 years):**Caries-free=* *0.52±0.21 (n=40);* *Caries-active=* *0.57±0.19 (n=40)* | FAIR |

FRAP: Ferric Reducing Antioxidant Power; TBARS: Thiobarbituric Acid Reactive Substances; ABTS: 2,2-azino-di (3-ethylbenzthiazoline-6-sulphonate)