Table S1: Starch types descriptions.

Descriptions of Starch types
Type 1 – Starch granules predominantly lenticular (circular or subcircular in frontal view, elliptic in lateral view), rarely with other shapes (ovoid, concave-convex); 10–35 μm in diameter; lamellated (lamellae distinct or indistinct, concentric, fine) or non-lamellated; hilum distinct (centric, punctiform or – mainly in lateral view – elongated, 5/6–1 × the maximum diameter), indistinct, or invisible; margin entire; Maltese cross distinct, centric, symmetric, with thin lines in the center getting wider to the apices (the cross turns wider and indistinct with the cooking process).
Type 2 – Starch granules polyhedral, spherical or subspherical; 3–9 μm in diameter; non-lamellated; hilum distinct (centric, punctiform) or invisible, margin entire; Maltese cross distinct, centric, symmetric, with thin lines.
Type 3 – Starch granules sub-polyhedral to polyhedral-subspherical; non-lamellated; 10–20 μm in diameter; hilum centric, distinct, stellate, margin entire; Maltese cross distinct, centric, symmetric, with lines thinner at the center, getting thicker towards the margin.
Type 4 – Starch granules ovoid-ellipsoid to ellipsoid-ovoid; lamellated, with lamellae distinct, concentric, fine; hilum centric, distinct, elongated, 1/2-3/4 × the maximum diameter; margin entire; Maltese cross symmetrical, with thin lines.

Table S2 – Morphometric traits of the type 1 (medium-sized) non-degraded starch granules found in the dental calculus of the studied individuals of Torre Velha- (TVCA).
The Triticeae type 2 granules have not been considered.

Individual	**Total grains (N_1)**	**Non-degraded grains (N_2)**	**N_2 max. length (μm)**	**Description**	**Identification**
TVCA 1 Adult female >30 years old	15	10	20.0-33.0 (26.2)	Granules simple, lenticular. Non-lamellated (Fig.4a) or, lamellated, with lamellae distinct, concentric. Margins entire (Fig. 4b). Maltese cross invisible or indistinct, centric (Fig.4a) Strong reaction with Lugol's iodine staining (Fig.).	Triticeae type 1 (probably *Triticum* sp. or *Secale* sp.)
TVCA 2 Adult male 40-50 years old 7th-9th century	134	40	27.0-36.0 (31.1)	Granules simple, lenticular (Fig.2a-d), rarely ovoid or concave-convex. Lamellated (Fig. 2b-c) or non-lamellated (Fig.2a, b), with lamellae concentric, thin (Fig.2b, c). Hilum distinct (Fig. 2a, c) or invisible (Fig. 2a-c), centric, punctiform or elongated. Surface smooth or with reticulate depressions (Fig. 2a). Maltese cross distinct, with lines straight, thin at the center, getting thicker to the periphery. Strong reaction with Lugol's iodine staining (Fig. 2d).	Triticeae type 1 (probably *Secale* sp. or *Triticum* sp.)
TVCA 3 Adult	21	7	18.0-27.0 (22.5)	Granules simple, lenticular (Fig.2e), rarely concave-convex or plane-convex (Fig.2e). Margins entire (Fig. 2e, f). Strong reaction with Lugol's iodine staining (Fig.2f).	Triticeae type 1
TVCA 4 Adult Male 40-50 years old 11th-12th century	16	6	14.0-25.0 (20.6)	Granules simple, lenticular. Non-lamellated or with lamellae indistinct, concentric (Fig. 3j). Hilum invisible or indistinct, centric. Margins entire (Fig. 3i-k). Strong reaction with Lugol's iodine staining (Fig. 3k).	Triticeae type 1
TVCA 5 Adult male 20-30 years old 11th-12th century	1	0	___	Granule simple, lenticular (Fig. 2g). Diameter = 46 μm. Lamellated, with lamellae indistinct, concentric. Hilum indistinct, centric. Margins entire. Surface with a bulged area near the center (Fig. 2g).	Triticeae type 1 (probably *Triticum* sp. or *Secale* sp., less probably *Hordeum* sp.)
TVCA 6 Female >30 years old	8	4	20.0-24.0 (22.0)	Granules simple, lenticular (Fig.2h). Non-lamellated. Hilum centric, elongated.	Triticeae type 1
TVCA 7 Adult female 40-50 years old	25	10	16.0-26.1 (20.1)	Granules simple, lenticular (Fig.2i). Maltese cross symmetric, with lines thin (Fig.4f), sometimes thick (Fig. 4e).	Triticeae type 1

Table S3 – Morphometric traits of the type 1 (medium-sized) non-degraded starch granules found in the dental calculus of the studied individuals of Mós (MOTM).
The Triticeae type 2 granules have not been considered.

Individual	Total grains (N_1)	Non-degraded grains (N_2)	N_2 max. length (μm)	Description	Identification
MOTM 1 Adult male	22	13	16-24.0 (21.4)	Granules simple, generally lenticular, sometimes plane-convex, sub-reniform or ovoid (Fig.2k). Non-lamellated or with lamellae indistinct, concentric (Fig. 2j, k). Hilum invisible or indistinct, centric, rarely distinct (Fig. 2j). Maltese cross indistinct (Fig. 4g) or invisible (Fig. 4h). Margins entire (Fig. 4 k) or cracked (Fig. 4g).	Triticeae type 1
MOTM 2 Adult female	7	6	24.0-33.5 (29.5)	Granules simple, lenticular (Fig. 2l). Non-lamellated, or lamellated with lamellae indistinct (Fig. 2l). Hilum invisible or indistinct, centric (Fig. 2l), rarely distinct. Margins entire (Fig.2l). Maltese cross, symmetric, generally distinct (sometimes indistinct), with lines thin at the center, getting thicker to the periphery (Fig. 4i).	Triticeae type 1 (probably *Secale* sp. or *Triticum* sp.)
	7	7	15.0-19.5 (16.6)	Granules compound, polyhedral; non-lamellated; shortly fissured; hilum centric, distinct, stellate (Fig. 3a). Strong reaction with Lugol's iodine staining (Fig. 3b). Maltese cross indistinct.	Paniceae (*Setaria* sp. or, less probably, *Panicum* sp.)
	1	1	20.0	Granule simple; ovoid-ellipsoid; lamellated with lamellae centric, distinct, fine, complete. Hilum distinct, centric, elongated, ca. 1/3 × the grain length (Fig. 3c).	Fabaceae
	1	—	—	Granule irregularly curved-ellipsoid. Length ca. 60 μm. Lamellated, with lamellae indistinct, concentric, fine. Maltese cross indistinct, confused, with thick lines (Fig. 4j).	Fabaceae? Triticeae type 1?
MOTM 3 Adult female >30 years old	39	13	15.5-27.0 (21.5)	Granules simple, lenticular (Fig. 3f-h). Non-lamellated or with lamellae indistinct. Hilum invisible, indistinct, or distinct, centric. Surface smooth, sometimes with a reticulum of pressure facets (Fig. 3f, g). Strong reaction with Lugol's iodine staining.	Triticeae type 1
	1	1	20.6	Granules simple, ellipsoid-ovoid, lamellated with lamellae distinct, fine, concentric. Hilum slightly exocentric, linear, ca. ½ × the grain length (Fig. 3 h)	Fabaceae
MOTM 4 Non-adult	2.5-3.5 years 21	11	15.0-24.0 (19.6)	Granules simple, lenticular (Fig. 3j, k). Lamellated with lamellae indistinct (Fig. 3i) or distinct, concentric, fine (Fig. 3j). Hilum invisible or indistinct, concentric (Fig. 3j). Margins entire (Fig. 3i-k). Maltese cross invisible or indistinct. Strong or, more rarely, mild reaction with Lugol's iodine staining (Fig. 3k).	Triticeae type 1
			15.0	Granules simple, sub-polyhedral (Fig. 4l). non-lamellated. Hilum centric, punctiform (Fig. 4l). Margins entire. Maltese cross indistinct, with thin lines (Fig. 4l)	Paniceae (*Setaria* sp. or, less probably, *Panicum* sp.)

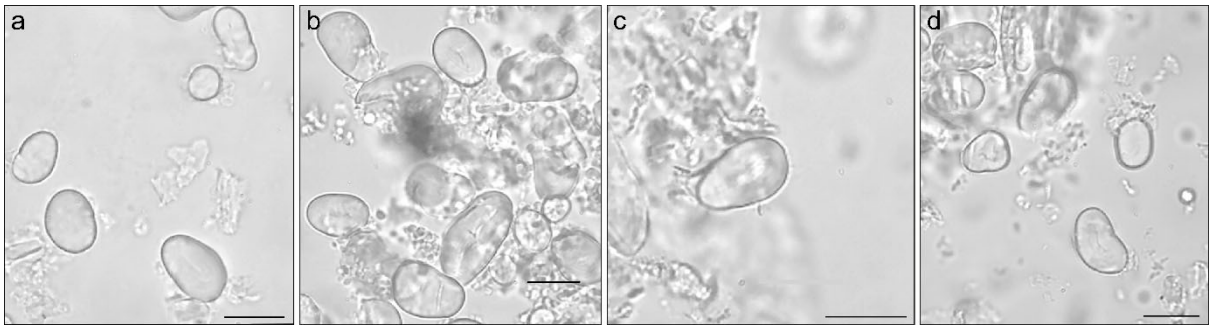


Figure S1: Starch grains of Fabaceae from the reference collection of the Department of Life Sciences of the University of Coimbra. a) *Cicer arietinum*; b) *Lens culinaris*; c) *Vicia faba*; d) *Vigna caracalla*. Bars = 20 μm.