

## Supplementary material

**Table S1.** List of the identified  $\alpha$ -lactalbumin peptides with glycated lysine residues after tryptic and chymotryptic *in solution* digestion.

Trypsin	Chymotrypsin
QINNNKIW	TKCEVFRELKDL
IWCKDDHNPSSNICNISCDK	TKCEVFREL
DDHNPSSNICNISCDK	RELKDL
FLDDDLTDDIMCVKK	KDLKGYGGVSL
DKFLDDDLTDDIM	QINNNKIW
ILDVKVGINY	IWCKDDHNPSSNICNISCDK
LDQWLCEK	CKDDHNPSSNICNISCDKFL
	KILDVKVGINY
	LAHKALCSEKLDQW
	LAHKAL

For the identification of the glycation sites the analysed modifications were: lactosylation, glycation with a hexose and carboxymethylation (marker of the advanced Maillard reaction).

**Table S2.** List of the identified  $\beta$ -lactoglobulin peptides with glycated lysines after tryptic and chymotryptic *in solution* digestion.

Trypsin	Chymotrypsin
LIVTQTMKGLDIQK	DIQKVAGTW
GLDIQKVAGTWY	VEELKPTPEGDLEIL
VYVEELKPTPEGDLEILLQK	VEELKPTPEGDLEILLQK
VYVEELKPTPEGDLEILLQKWENGECAQKKIIAEK	VEELKPTPEGDLEILLQ
VYVEELKPTPEGDLEIL	VEELKPTPEGDLEILL
WENGECAQK	WENGECAQKK
WENGECAQKK	ENGECAQKKIIAEKTKIPAVF
IIAEKTK	IIAEKTK
IIAEKTKIPAVFK	KIDALNENKVL
IDALNENKVLVLDTDYK	KIDALNENKVLV
IDALNENKVL	VLVLDTDYKKY
KIDALNENKVL	DTDYKKYLLF
VLVLDTDYKK	VRTPEVDDEALEK
TPEVDDEALEKFDK	VRTPEVDDEALEKF
TPEVDDEALEKF	VRTPEVDDEALEKF
FDKALK	TPEVDDEALEKF
ALKALPMHIR	EKFDKALKAL

For the identification of the glycation sites the analysed modifications were: lactosylation, glycation with a hexose and carboxymethylation (marker of the advanced Maillard reaction).

**Figure S1.** SDS-PAGE gel image (1,2 = pasteurized milk; 3,4 = UHT milk; p = precipitated caseins; s = extracted whey). Marker values are expressed as kDa.

