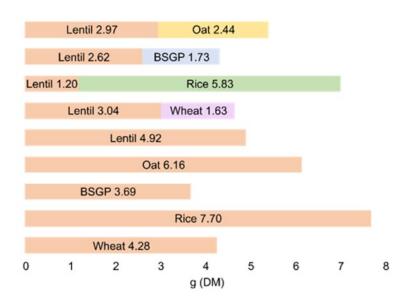
## **Supplementary Material**

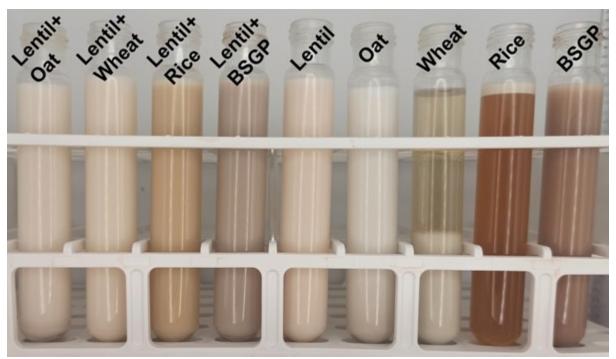
Supplementary Table 1 Results of the sugar and FODMAP analysis of the PIs by HPAEC-PAD, in g/100 g DM.

			Lentil	Oat	BSGP	Rice	Wheat
Glucose			0.11 ± 0.01	0.03 ± 0.01	0.29 ± 0.01	2.33 ± 0.02	0.28 ± 0.04
Fructose			$0.05 \pm 0.01$	n.d.*	$0.07 \pm 0.00$	$0.34 \pm 0.00$	$0.13 \pm 0.00$
Sucrose			1.01 ± 0.02	0.77 ± 0.00	$0.01 \pm 0.00$	$0.2 \pm 0.01$	$0.06 \pm 0.00$
	EF**		-	-	-	-	-
FODMAPs	Polyols	Xylitol	$0.02 \pm 0.00$	n.d.	n.d.	$0.01 \pm 0.00$	n.d.
		Sorbitol	$0.01 \pm 0.00$	n.d.	n.d.	$0.09 \pm 0.00$	$0.21 \pm 0.00$
		Mannitol	0.62 ± 0.01	n.d.	n.d.	$0.01 \pm 0.00$	$0.03 \pm 0.00$
	Oligo- saccharides (OS)	∑ Polyols	0.65 ± 0.01	n.d.	n.d.	$0.11 \pm 0.01$	$0.24 \pm 0.00$
		Raffinose/ Stachyose	2.01 ± 0.03	0.17 ± 0.00	n.d.	0.02 ± 0.00	0.01 ± 0.00
		Verbascose	$0.43 \pm 0.01$	$0.01 \pm 0.00$	n.d.	n.d.	n.d.
		Fructans	-†	n.d.	$0.14 \pm 0.05$	n.d.	0.67 ± 0.03
		ΣOS	2.44 ± 0.03	$0.18 \pm 0.00$	0.14 ± 0.05	$0.02 \pm 0.00$	$0.68 \pm 0.03$
	∑ FODMAPs		$3.09 \pm 0.03$	0.18 ±0.00	0.14 ± 0.05	$0.13 \pm 0.00$	$0.92 \pm 0.00$

<sup>\*</sup>n.d., not detected or levels below 0.0005 g / 100 g DM. \*\*Fructose in excess of glucose. †Fructans not determined as they are not present in legumes.



Supplementary Figure 1 Amount of PI (g DM) per 100 g emulsion in single-ingredient and blended emulsions.



Supplementary Figure 2 Photographs of PBMAs based on combined and single ingredients after 24h of storage.