Supplementary material

1 Particle size distribution of the beverage bases

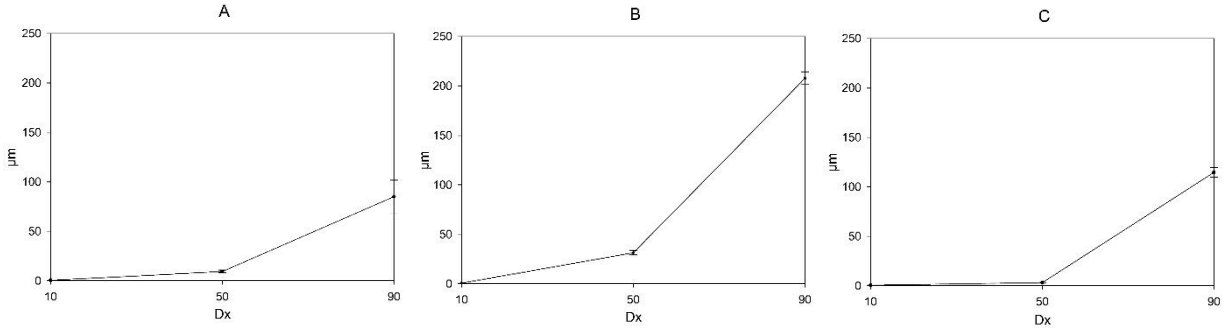

Figure s 1 Particle size distribution of unprocessed orange juice concentrates and Fanta Orange; A: Fanta Orange, B: OJC1, C: OJC2; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

OJC1

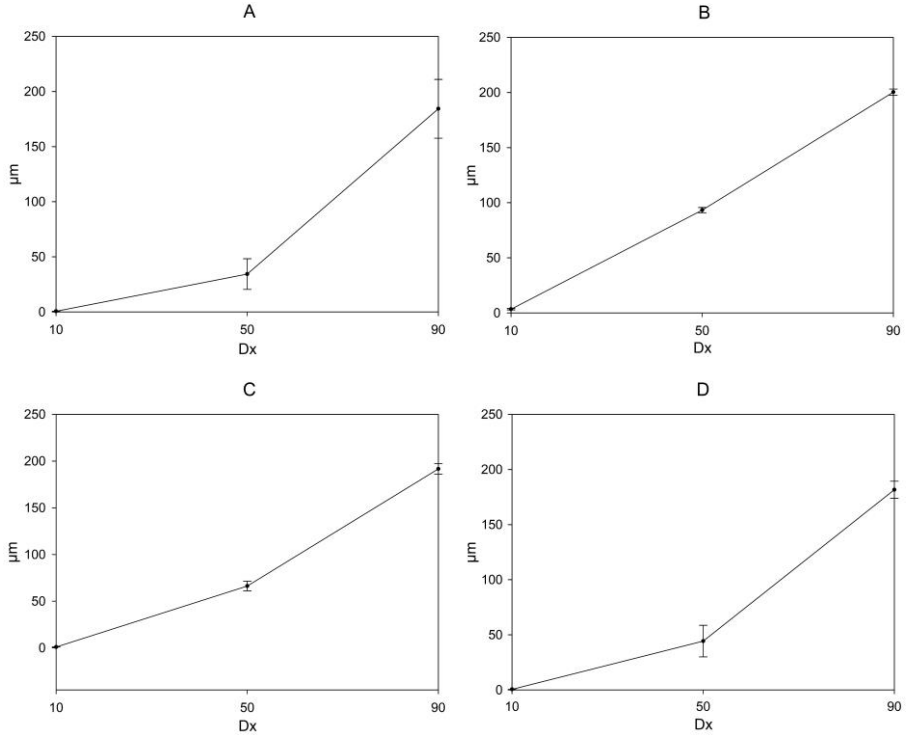

Figure s 2 Particle size distribution of beverage bases with OJC1 containing different stabilizers before homogenization; A: pectin 2 g/kg, B: GG 2 g/kg, C: LBG: 2 g/kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

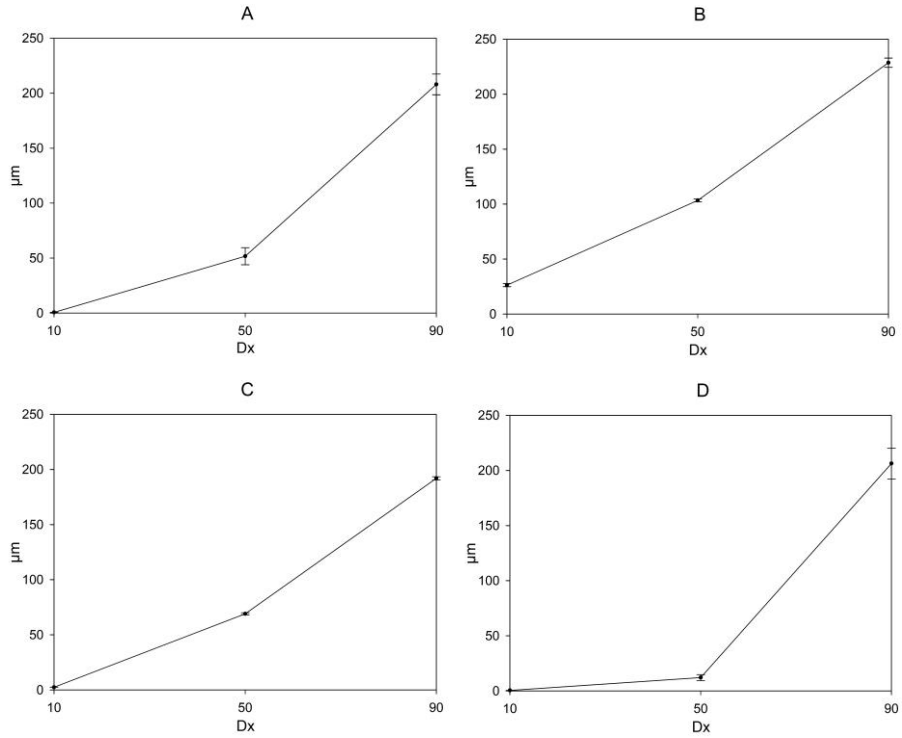

Figure s 3 Particle size distribution of beverage bases with OJC1 containing different stabilizers before homogenization; A: pectin 5 g/kg, B: GG 5 g/kg, C: LBG: 5 g/kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

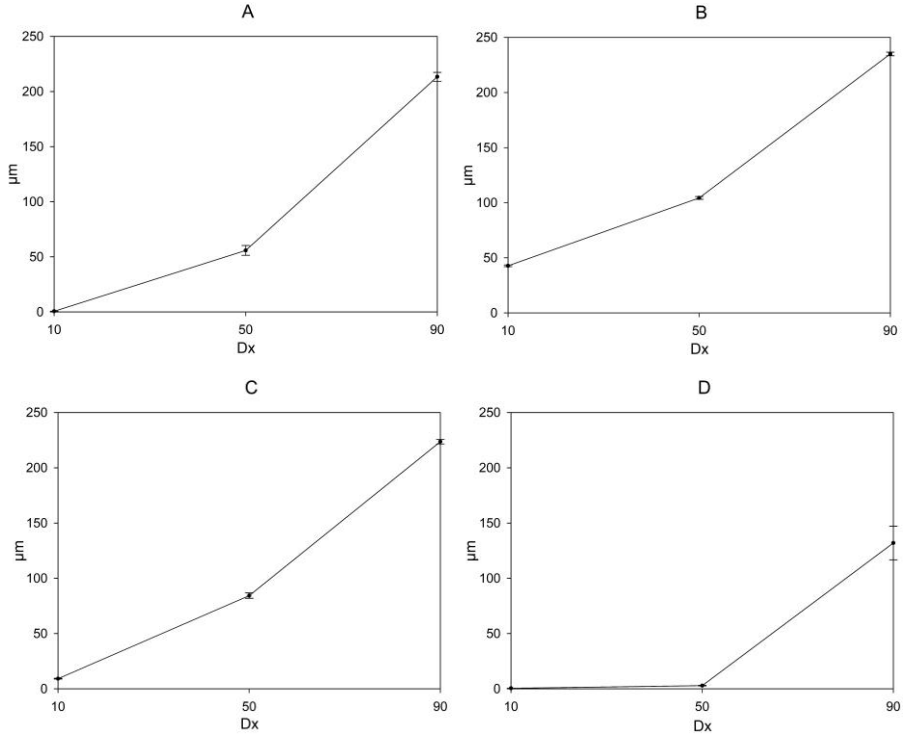

Figure s 4 Particle size distribution of beverage bases with OJC1 containing different stabilizers before homogenization; A: pectin 10 g/kg, B: GG 10 g/kg, C: LBG: 10 g/kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

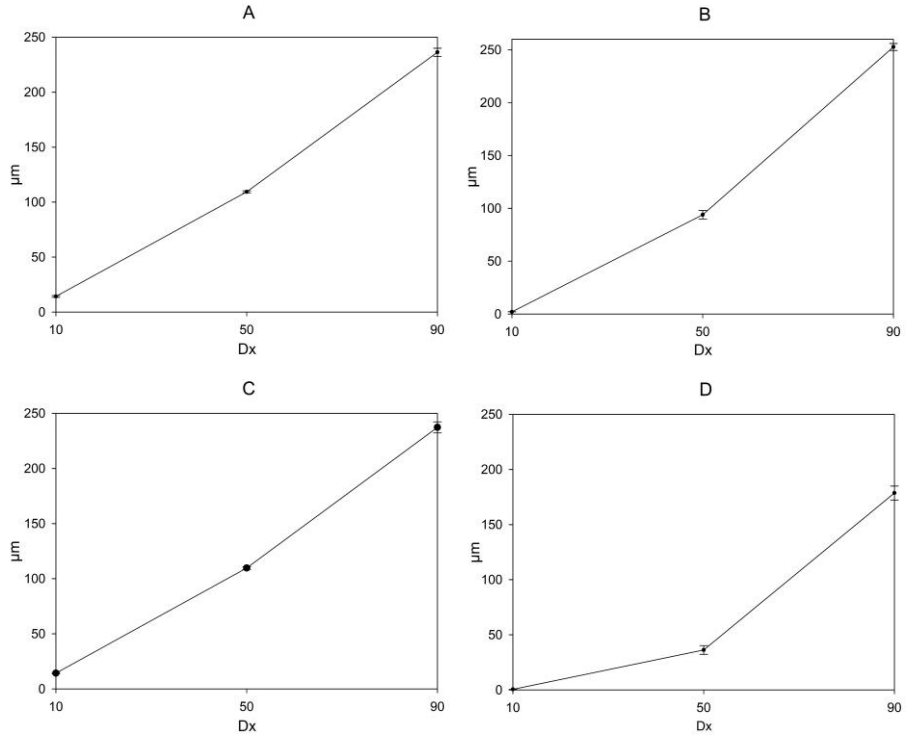

Figure s 5 Particle size distribution of beverage bases with OJC1 containing different stabilizers before homogenization; A: 2.5 g pectin + 2.5 g GG per kg, B: 2.5 g pectin + 2.5 g LBG per kg, C: 2.5 g GG + 2.5 g LBG per kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of $p < 0.05$

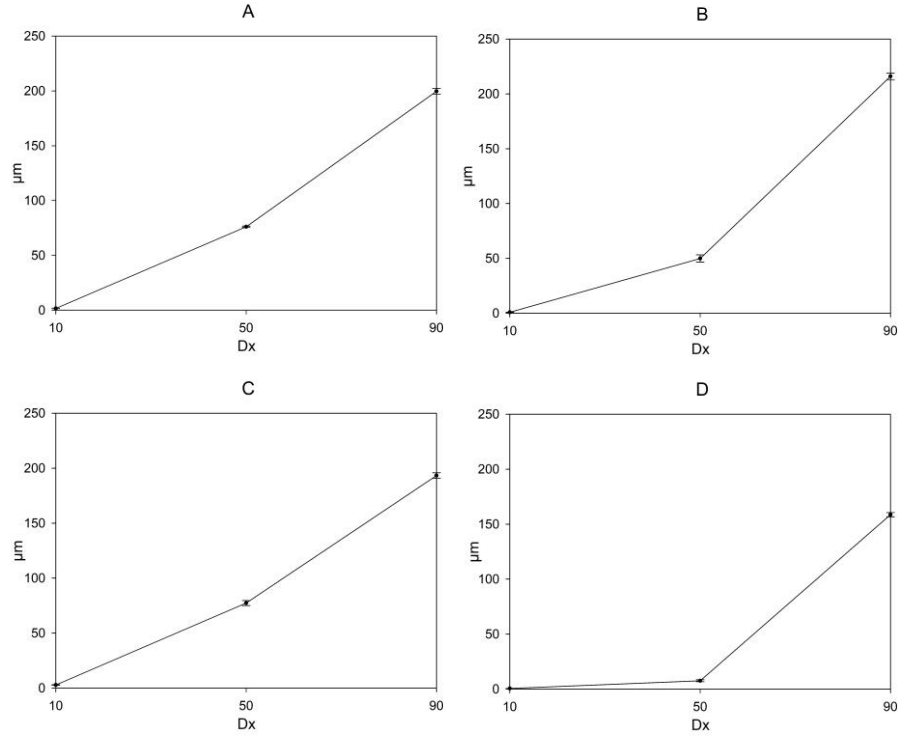

Figure s 6 particle size distribution of beverage bases with OJC1 containing different stabilizers + 3 g OO before homogenization; A: 2.5 g pectin + 2.5 g GG per kg, B: 2.5 g pectin + 2.5 g LBG per kg, C: 2.5 g GG + 2.5 g LBG per kg, D:

blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

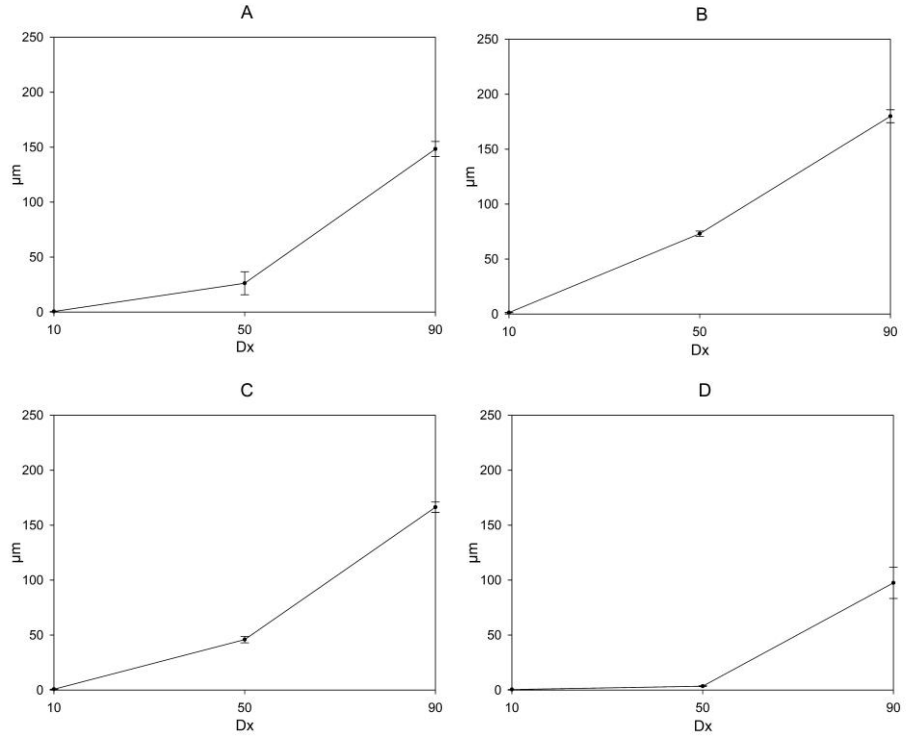

Figure s 7 Particle size distribution of beverage bases with OJC1 containing different stabilizers after homogenization; A: pectin 2 g/kg, B: GG 2 g/kg, C: LBG: 2 g/kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

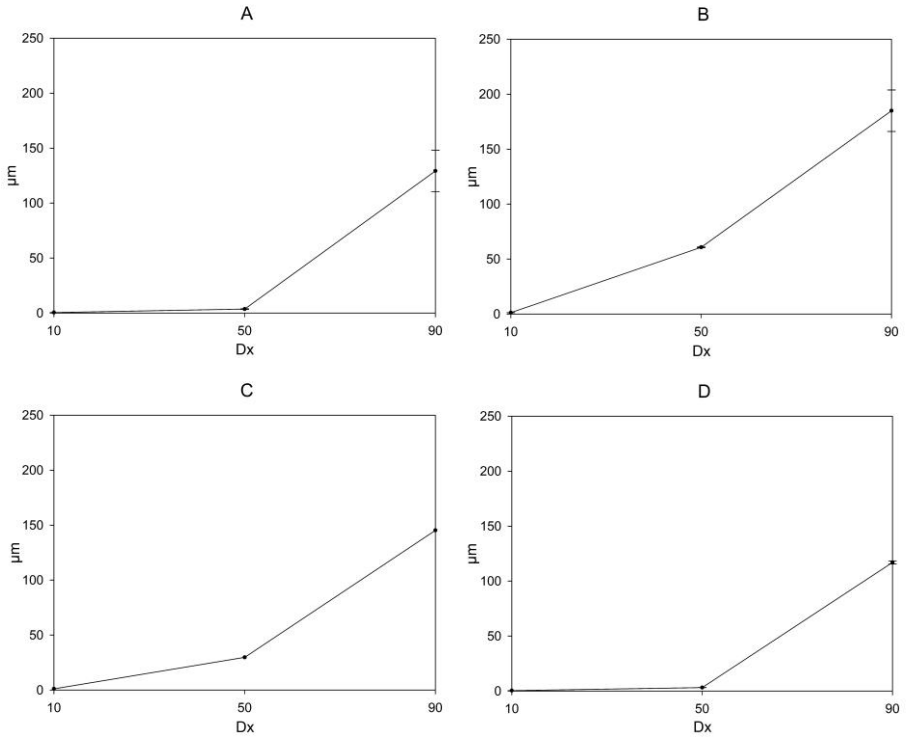

Figure s 8 Particle size distribution of beverage bases with OJC1 containing different stabilizers after homogenization; A: pectin 5 g/kg, B: GG 5 g/kg, C: LBG: 5 g/kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

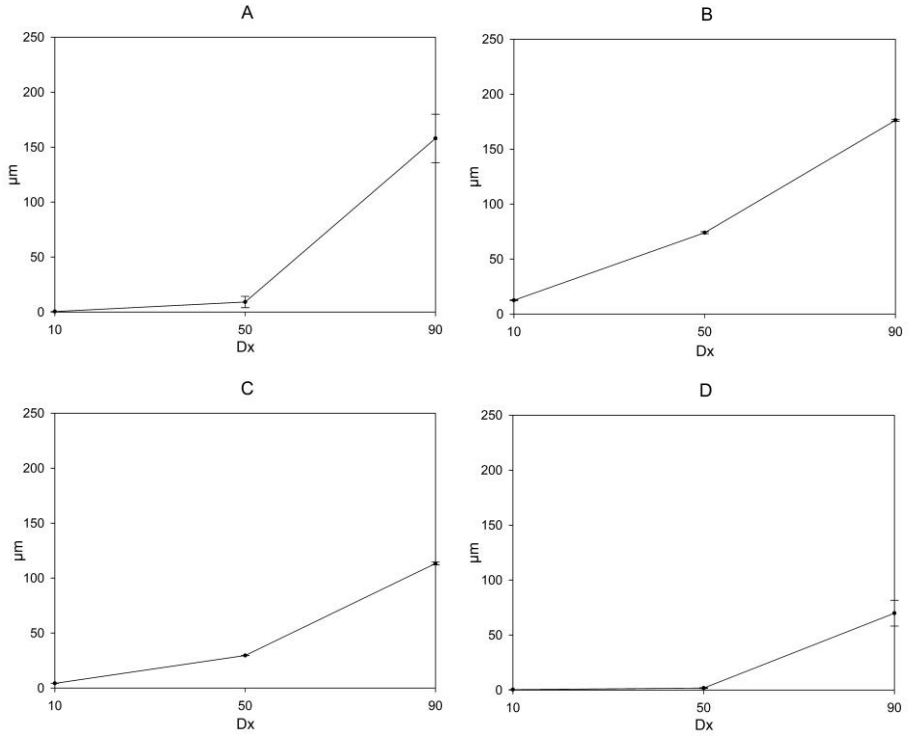

Figure s 9 Particle size distribution of beverage bases with OJC1 containing different stabilizers after homogenization; A: pectin 10 g/kg, B: GG 10 g/kg, C: LBG: 10 g/kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of $p < 0.05$

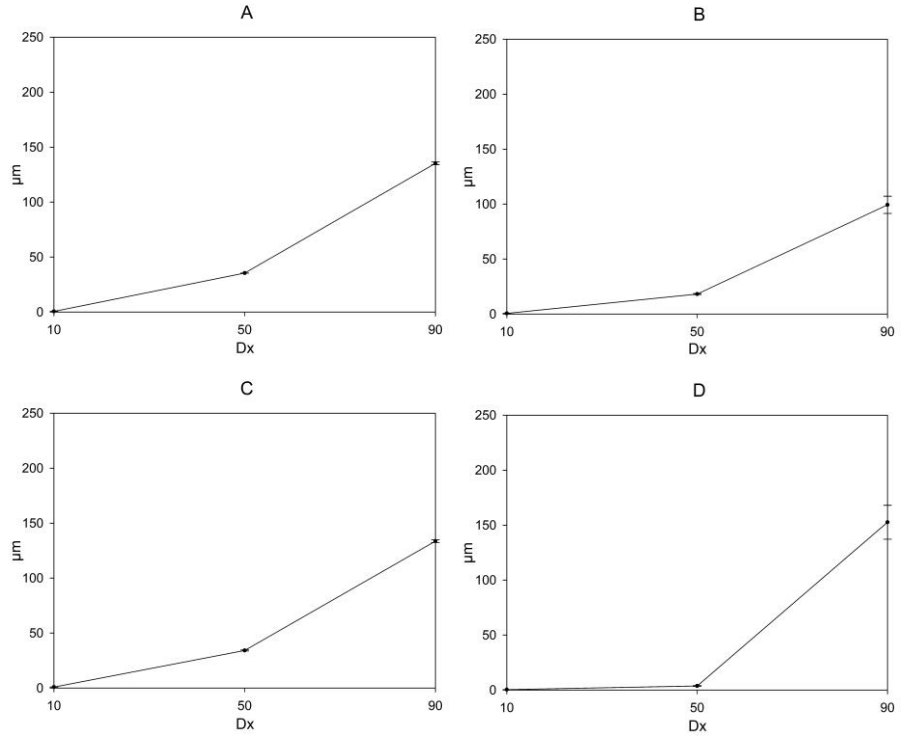

Figure s 10 Particle size distribution of beverage bases with OJC1 containing different stabilizers after homogenization; A: 2.5 g pectin + 2.5 g GG per kg, B: 2.5 g pectin + 2.5 g LBG per kg, C: 2.5 g GG + 2.5 g LBG per kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of $p < 0.05$

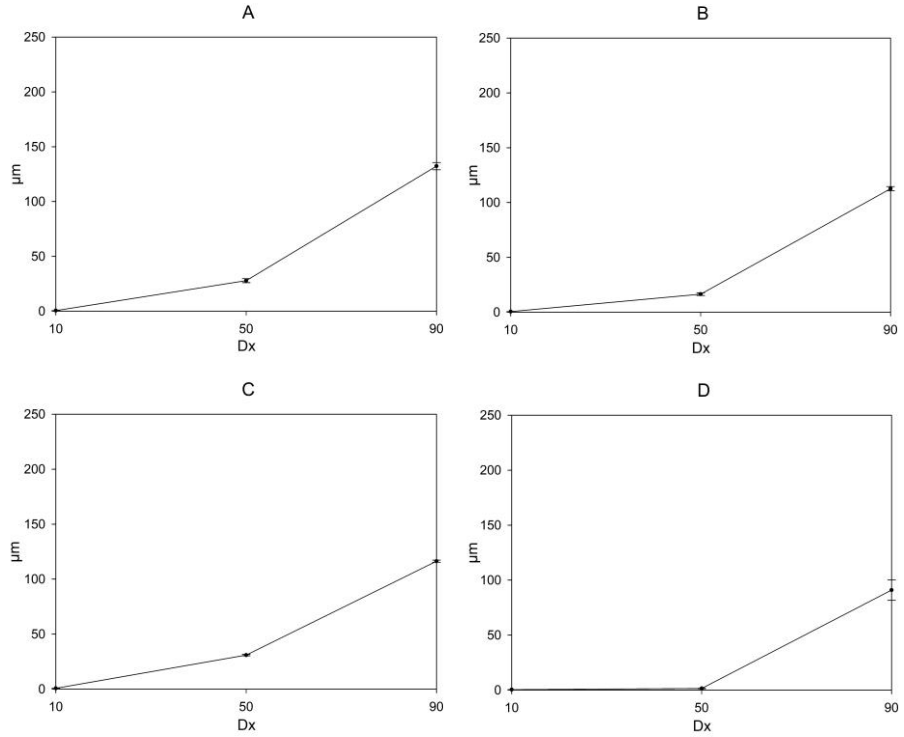

Figure s 11 Particle size distribution of beverage bases with OJC1 containing different stabilizers + 3 g OO after homogenization; A: 2.5 g pectin + 2.5 g GG per kg, B: 2.5 g pectin + 2.5 g LBG per kg, C: 2.5 g GG + 2.5 g LBG per kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of $p < 0.05$

OJC2

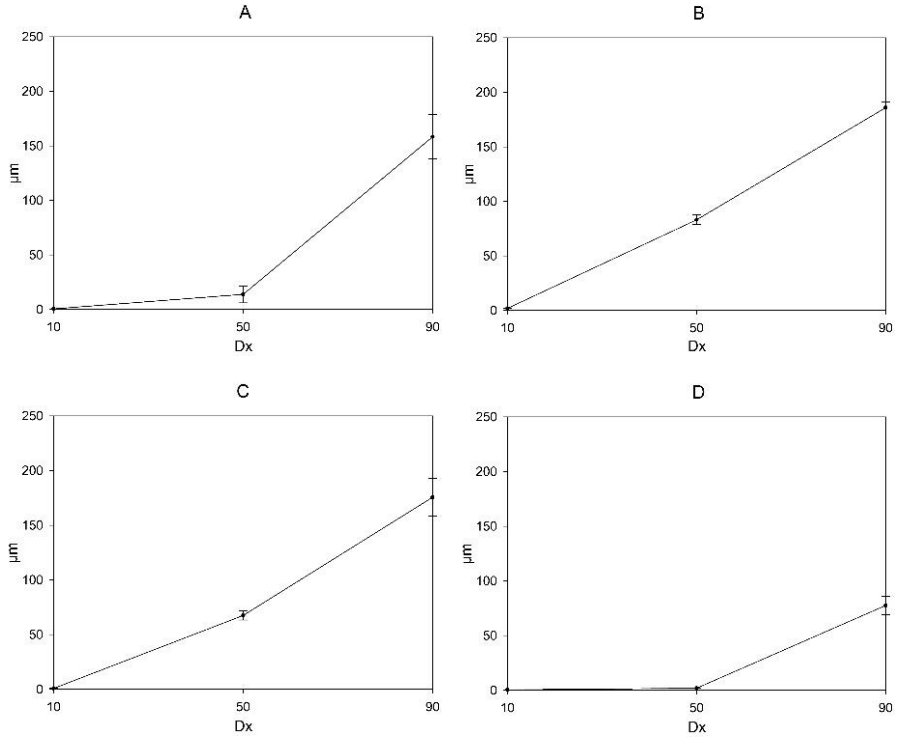

Figure s 12 Particle size distribution of beverage bases with OJC2 containing different stabilizers before homogenization; A: pectin 2 g/kg, B: GG 2 g/kg, C: LBG: 2 g/kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

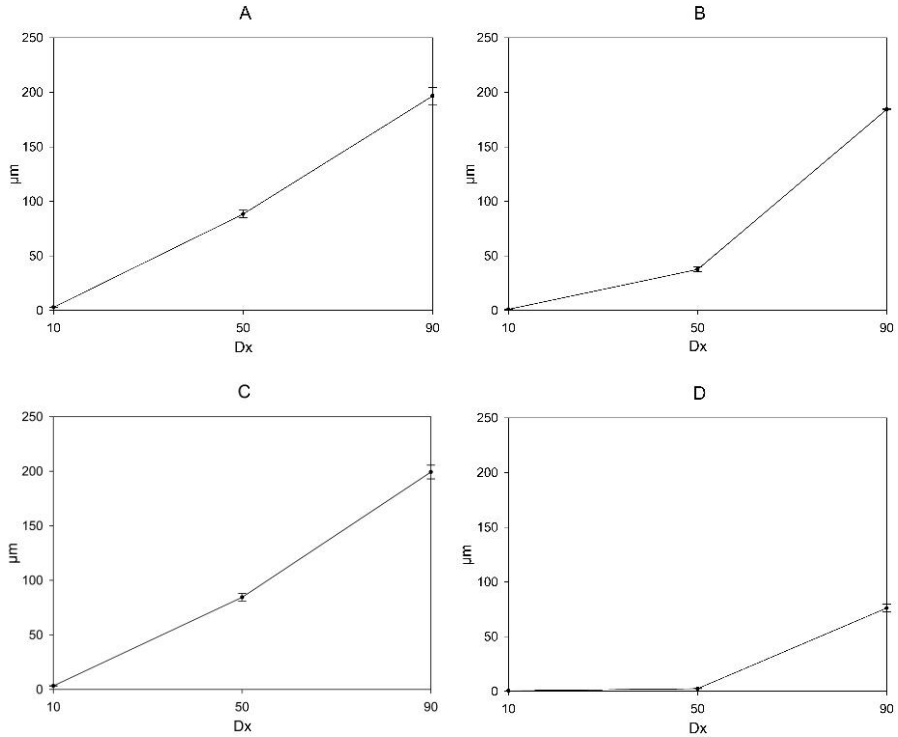

Figure s 13 Particle size distribution of beverage bases with OJC2 containing different stabilizers before homogenization; A: 2.5 g pectin + 2.5 g GG per kg, B: 2.5 g pectin + 2.5 g LBG per kg, C: 2.5 g GG + 2.5 g LBG per kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

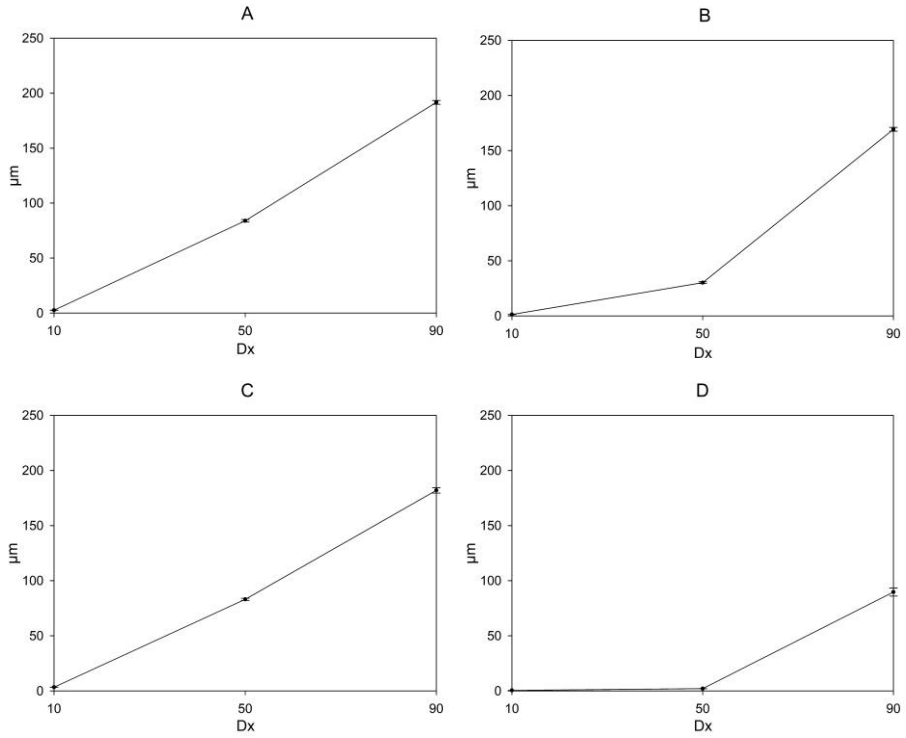

Figure s 14 Particle size distribution of beverage bases with OJC2 containing different stabilizers before homogenization; A: 3 g pectin + 3 g GG per kg, B: 3 g pectin + 3 g LBG per kg, C: 3 g GG + 3 g LBG per kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

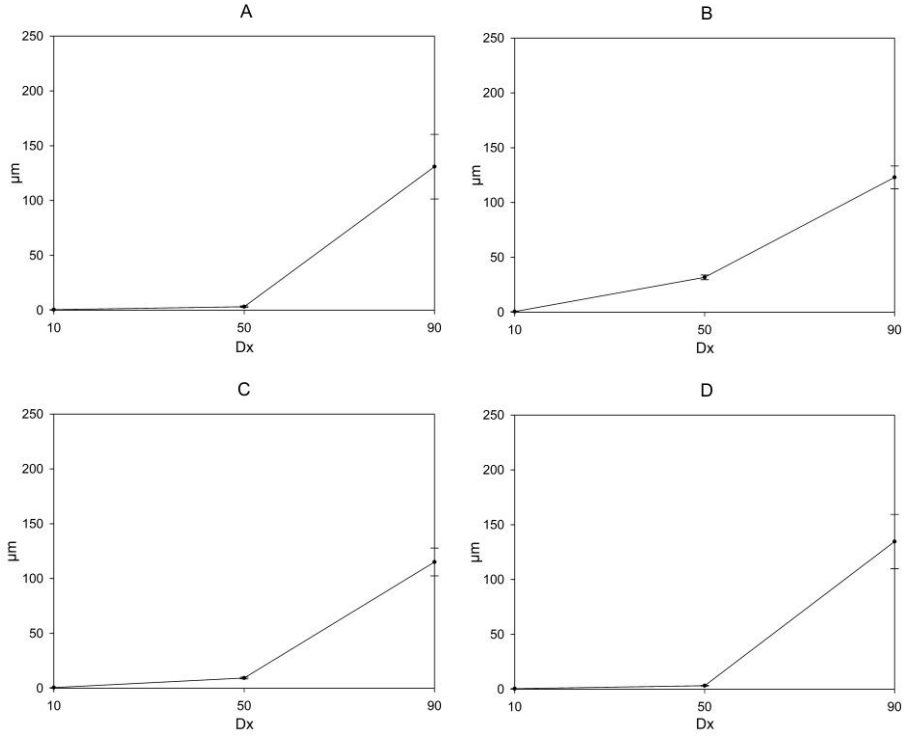

Figure s 15 Particle size distribution of beverage bases with OJC2 containing different stabilizers after homogenization; A: pectin 2 g/kg, B: GG 2 g/kg, C: LBG: 2 g/kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

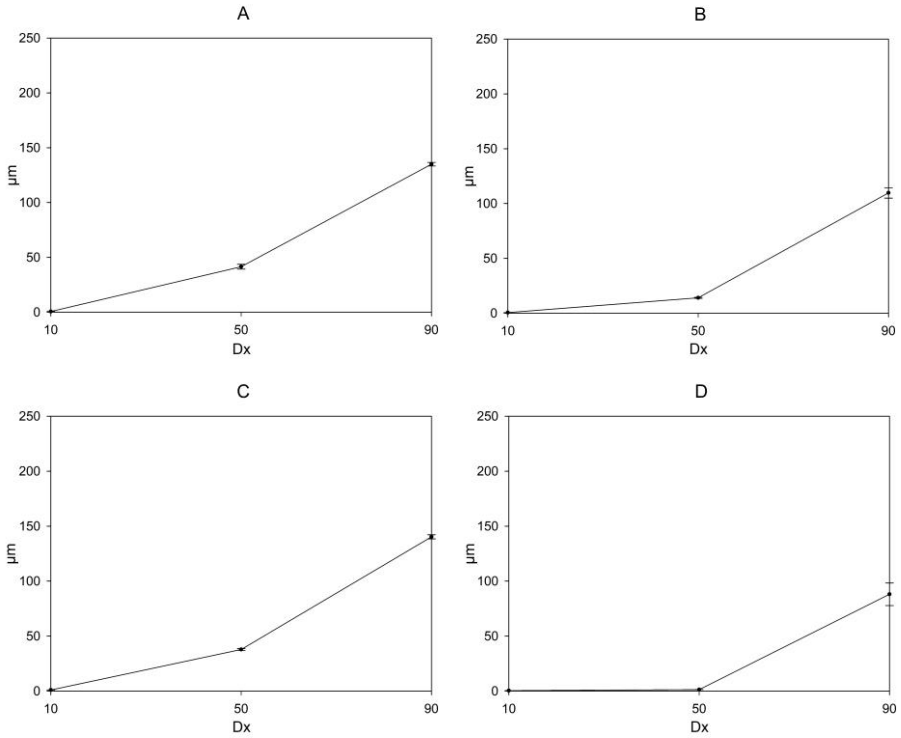

Figure s 16 Particle size distribution of beverage bases with OJC2 containing different stabilizers after homogenization; A: 2.5 g pectin + 2.5 g GG per kg, B: 2.5 g pectin + 2.5 g LBG per kg, C: 2.5 g GG + 2.5 g LBG per kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of $p < 0.05$

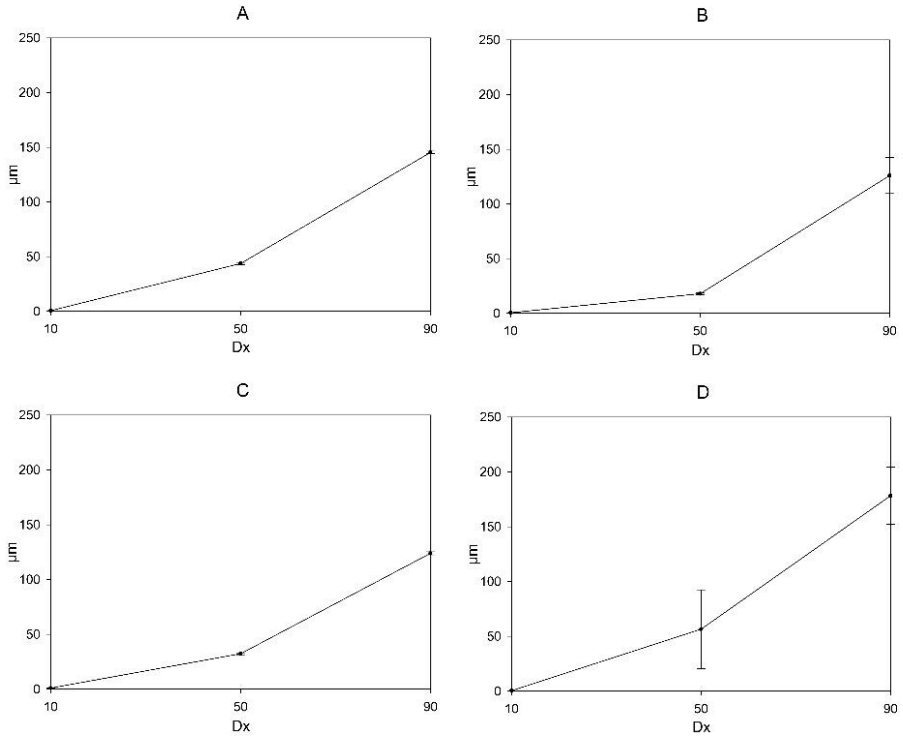

Figure s 17 Particle size distribution of beverage bases with OJC2 containing different stabilizers after homogenization; A: 3 g pectin + 3 g GG per kg, B: 3 g pectin + 3 g LBG per kg, C: 3 g GG + 3 g LBG per kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of $p < 0.05$

2 turbidity stability of the RTD-beverages

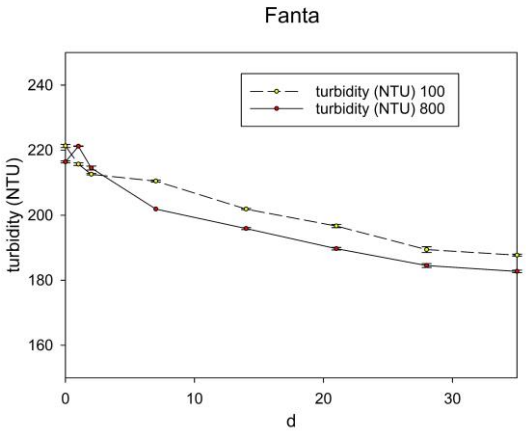

Figure s 18 Turbidity stability of Fanta Orange stored for 35 days at RT in 1 l PET-bottles; the dotted line shows the turbidity in NTU (nephelometric turbidity units) at 100 ml and the continous line at 800 ml of the bottle; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

OJC1

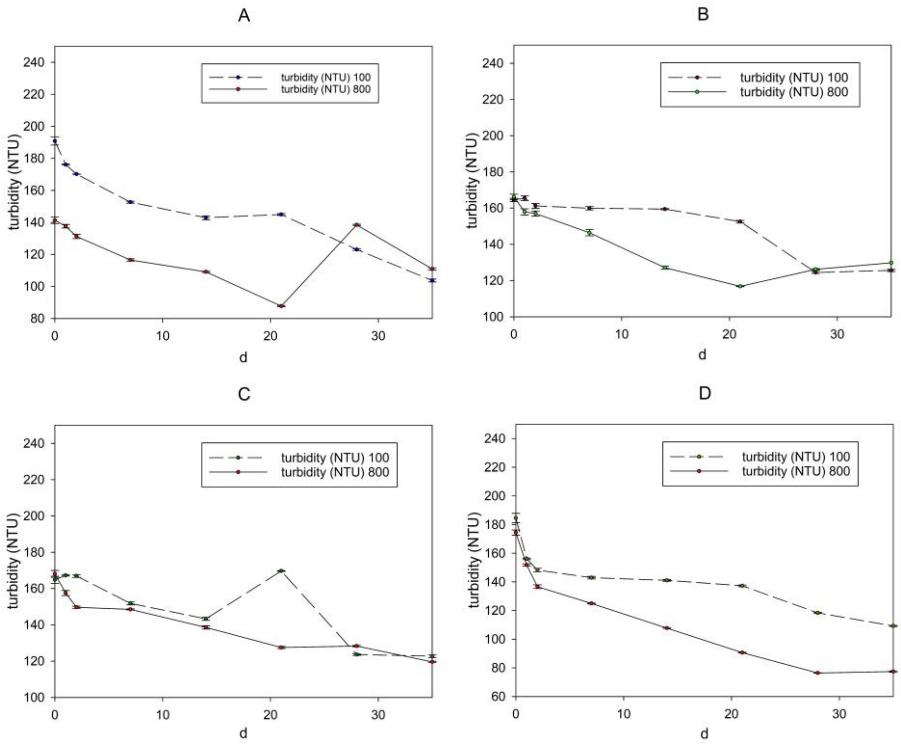

Figure s 19 Turbidity stability of RTD-beverages with OJC1 stored for 35 days at RT in 1 l PET-bottles; A: pectin 2 g/kg, B: GG 2 g/kg, C: LBG 2 g/kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

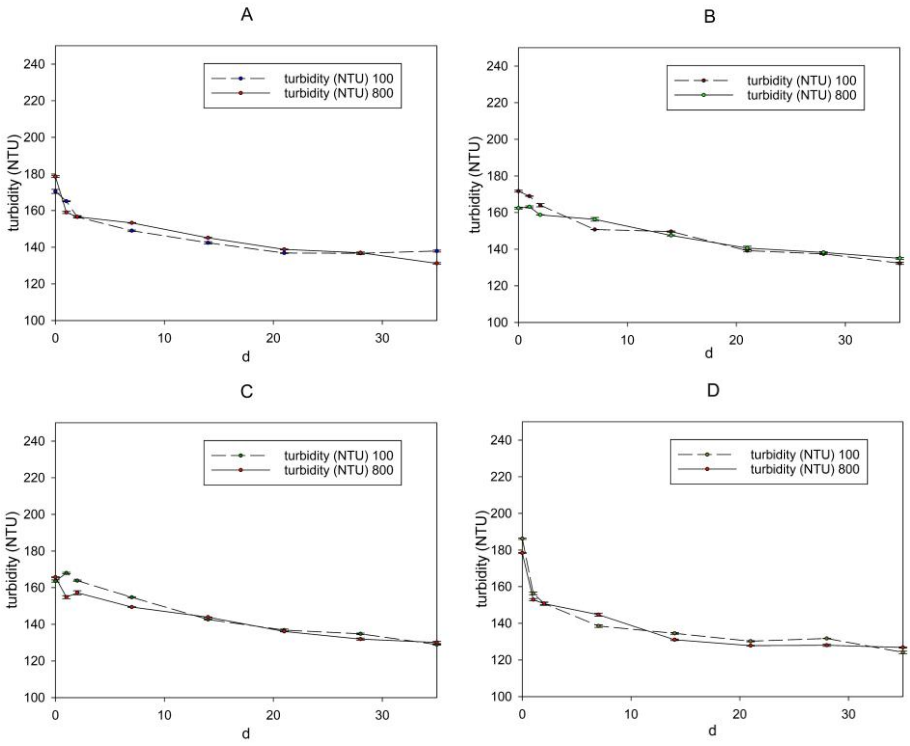

Figure s 20 Turbidity stability of RTD-beverages with OJC1 stored for 35 days at RT in 1 l PET-bottles; A: pectin 5 g/kg, B: GG 5 g/kg, C: LBG 5 g/kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

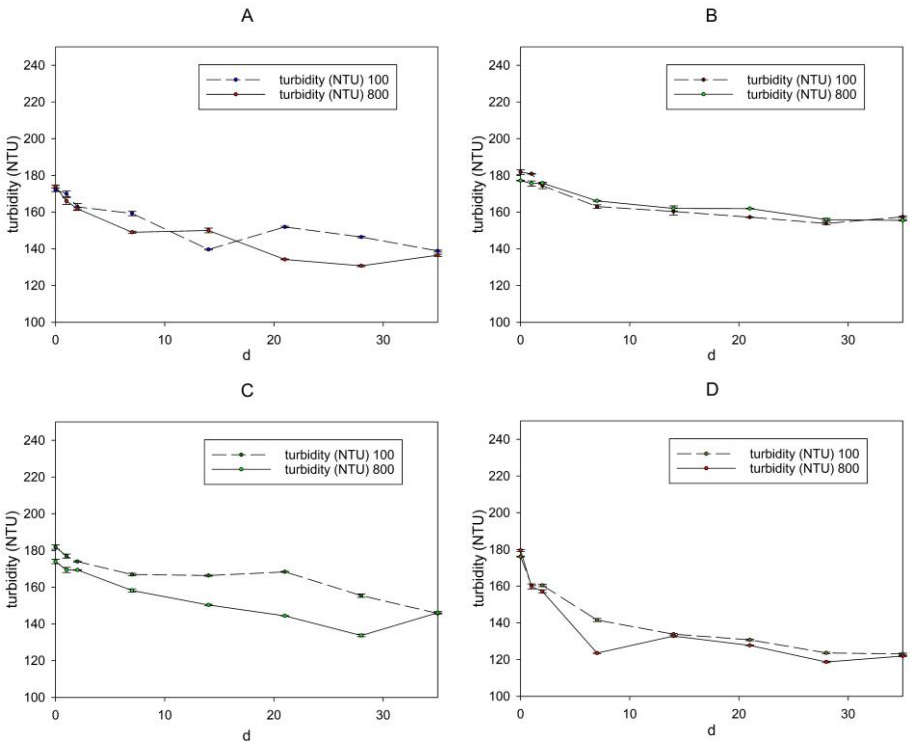

Figure s 21 Turbidity stability of RTD-beverages with OJC1 stored for 35 days at RT in 1 l PET-bottles; A: pectin 10 g/kg, B: GG 10 g/kg, C: LBG 10 g/kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

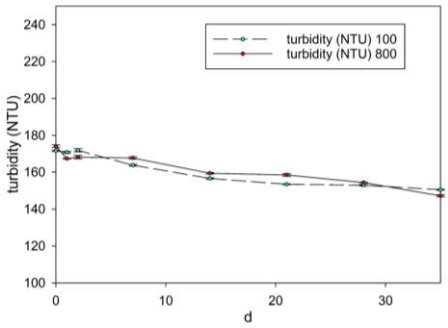

Figure s 22 Turbidity stability of RTD-beverages with OJC1 stored for 35 days at RT in 1 l PET-bottles; 2.5 g pectin + 2.5 g LBG per kg; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

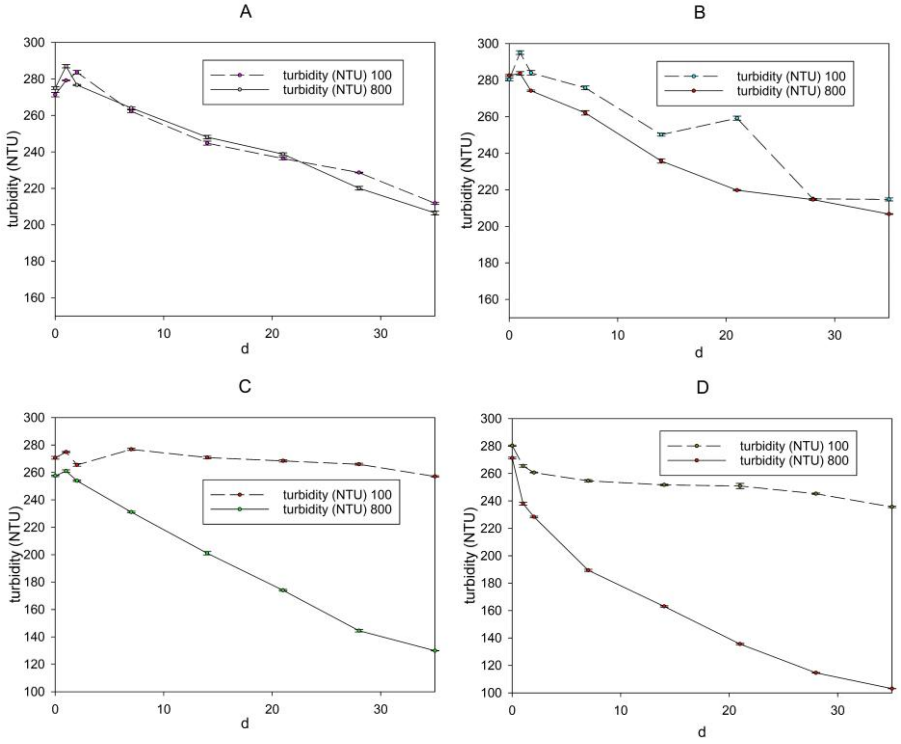

Figure s 23 Turbidity stability of RTD-beverages with OJC1 + 3 g OO stored for 35 days at RT in 1 l PET-bottles; A: 2.5 g pectin + 2.5 g GG per kg, B: 2.5 g pectin + 2.5 g LBG per kg C: 2.5 g GG + 2.5 g LBG per kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

OJC2

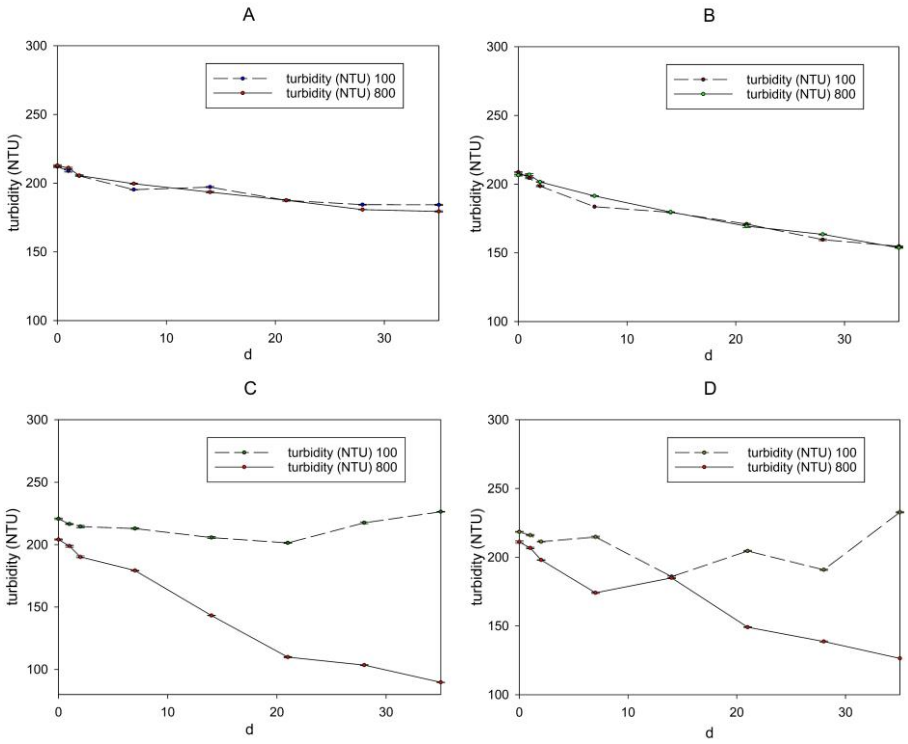

Figure s 24 Turbidity stability of RTD-beverages with OJC2 stored for 35 days at RT in 1 l PET-bottles; A: pectin 2 g/kg, B: GG 2 g/kg, C: LBG 2 g/kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

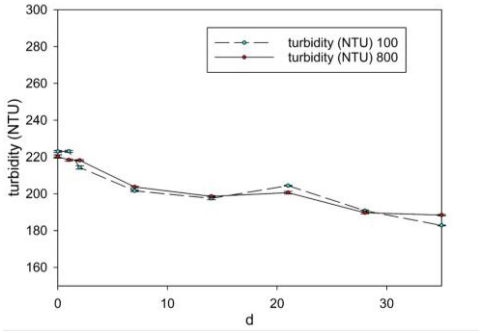

Figure s 25 Turbidity stability of RTD-beverages with OJC2 stored for 35 days at RT in 1 l PET-bottles; 2.5 g pectin + 2.5 g LBG per kg; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of p < 0.05

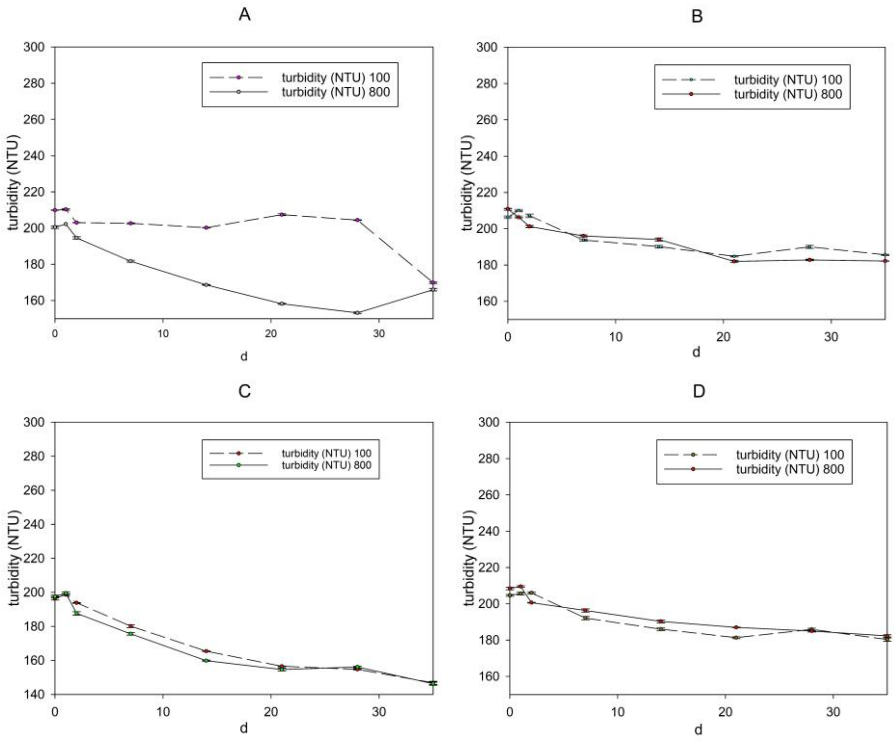

Figure s 26 Turbidity stability of RTD-beverages with OJC2 stored for 35 days at RT in 1 l PET-bottles; A: 3 g pectin + 3 g GG per kg, B: 3 g pectin + 3 g LBG per kg C: 3 g GG + 3 g LBG per kg, D: blank; mean values ± standard deviations; differences between groups were evaluated for significance based on mean AUC (n=3) and calculated at a significance level of $p < 0.05$