



Figure 1. Emil Christian Hansen.

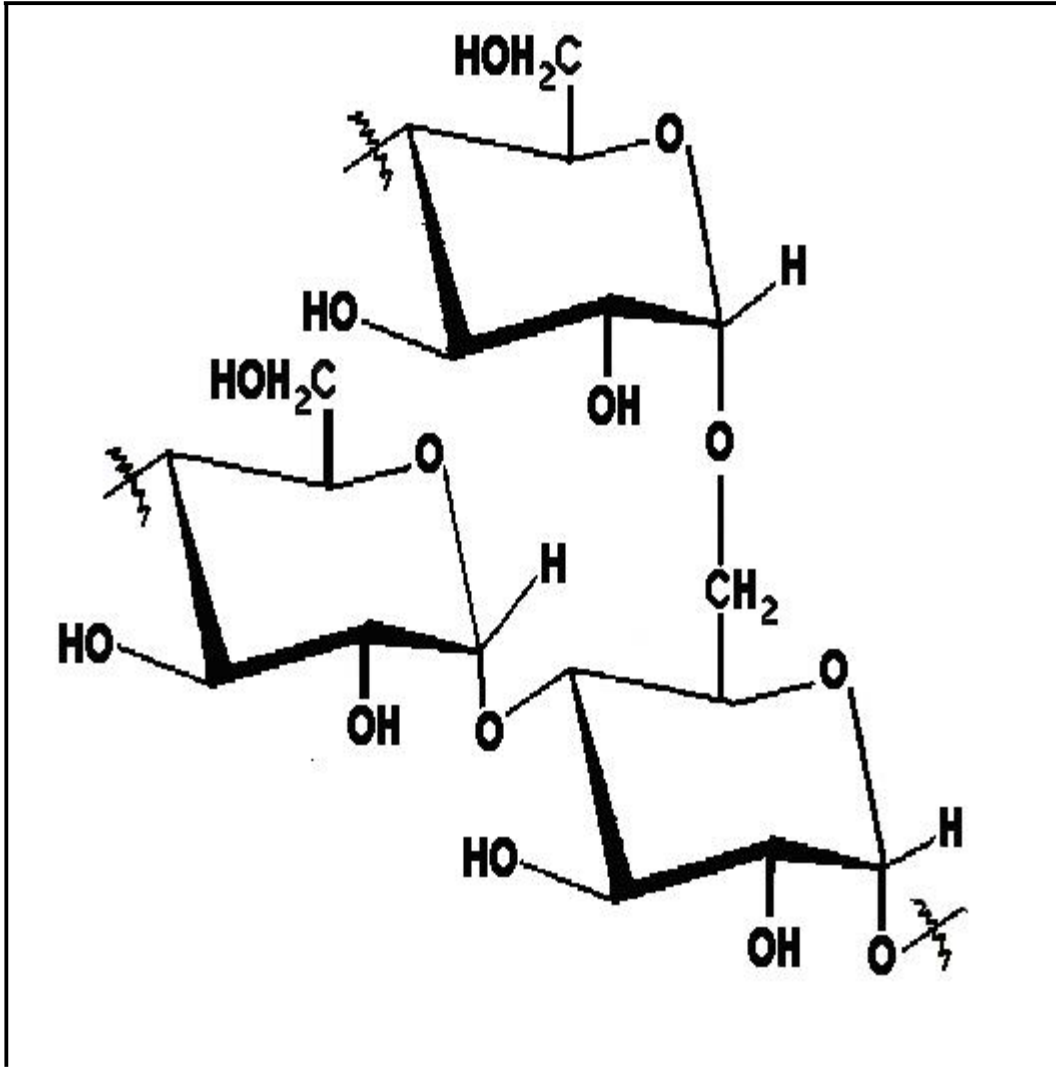


Figure 2. Structure of glycogen.

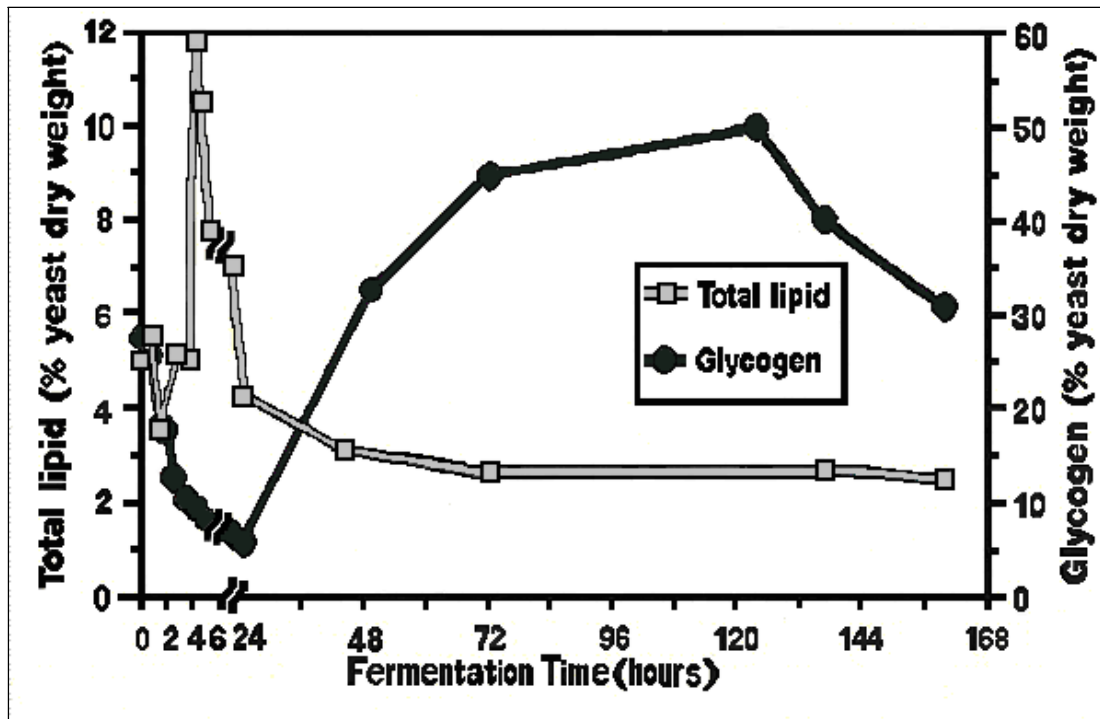


Figure 3. Intracellular concentration of glycogen and lipids in a lager yeast strain during fermentation of a 15° Plato wort.

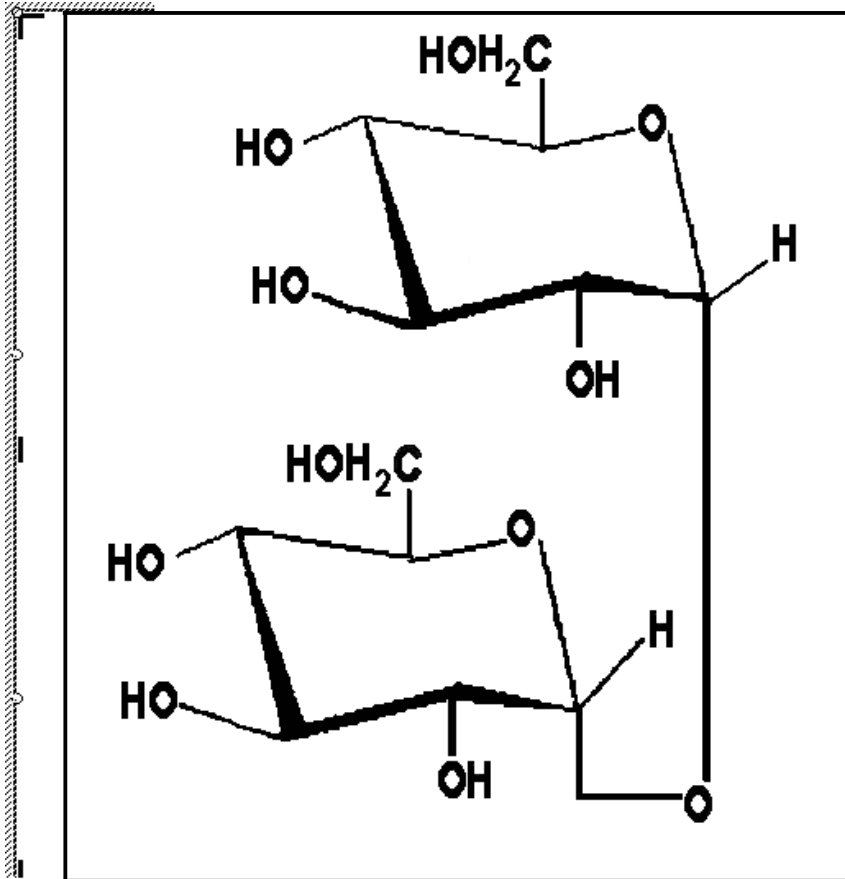


Figure 4. The structure of trehalose.

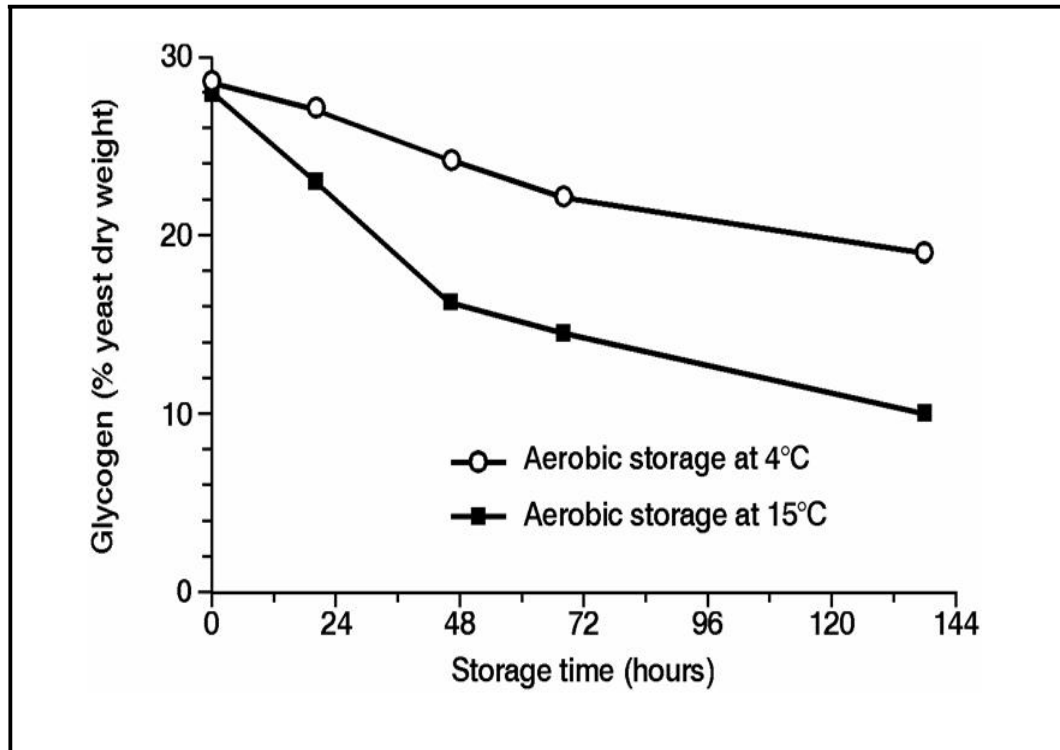


Figure 5. The effect of yeast storage temperature on intracellular glycogen concentration.

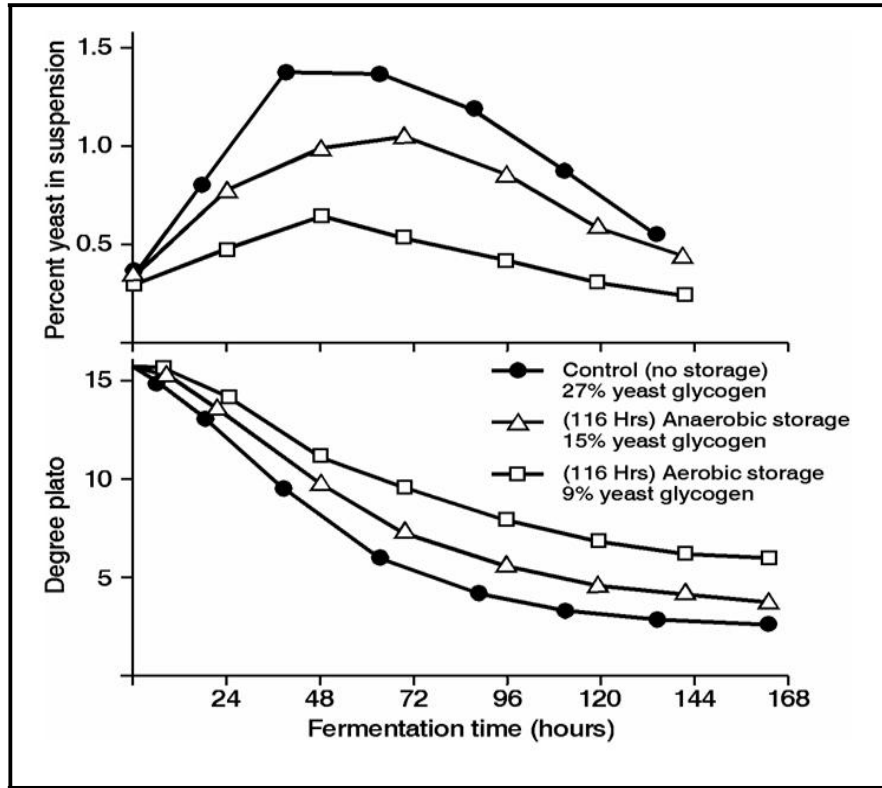


Figure 6. The effect of yeast glycogen at pitching on lager fermentation characteristics.

Table I. Yeast Condition Following Centrifugation from a 16° Plato Wort Fermentation.

Yeast Exit Temperature	16-18°C	28-30°C
Viability (%)	95	80
Respiratory deficient cells (%)	5	25
Glycogen (mg/g dry weight)	18.6	12.2

Table II. Concentration of Trehalose and Glycogen in Lager Yeast Following One, Four and Eight Cycles Following Fermentation in 15° Plato Wort.

	Cycles (generations)		
	One	Four	Eight
Trehalose ^a	8.8	9.2	11.6
Glycogen ^b	14.6	12.6	9.2

^a µg/g dry weight of yeast

^b ml/g dry weight of yeast