S2 Table: Parameters used in the mathematical model (IndiMeSH).

Parameter	Description	Value	Unit	Reference
D_{Carbon}	Diffusion coefficient of carbon	$5.9*10^{-10}$	m^2s^{-1}	**[1]**
D_{O2}	Diffusion coefficient of oxygen	$2*10^{-9}$	m^2s^{-1}	**[2]**
m_0	Average bacterial mass	$1*10^{-15}$	kg	**[3]**
m_{max}	Mass at division	$2*m_0/1.433$	kg	**[4]**
m_{crit}	Mass at cell death	$0.2*\ m_{max}$	kg	**[4]**
Y	Cell yield	0.06	kg mol^{-1} Carbon	**[5]**
μ_{max}	Maximum growth rate	$6.9*10^{-6}$	s^{-1}	**[6]**
$K_{C,lim}$	Monod half saturation coefficient for carbon	0.05	mM	**[5]**
$K_{O2,lim}$	Monod half saturation coefficient for oxygen	0.0063	mM	**[7]**
p_0	Unbiased tumbling probability	0.25	s^{-1}	**[8]**
χ	Chemotactic sensitivity	$2*10^{-8}$	m^2s^{-1}	**[9]**
v	Corrected cell velocity for 1-D movement	2	ms^{-1}	**[8]**

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