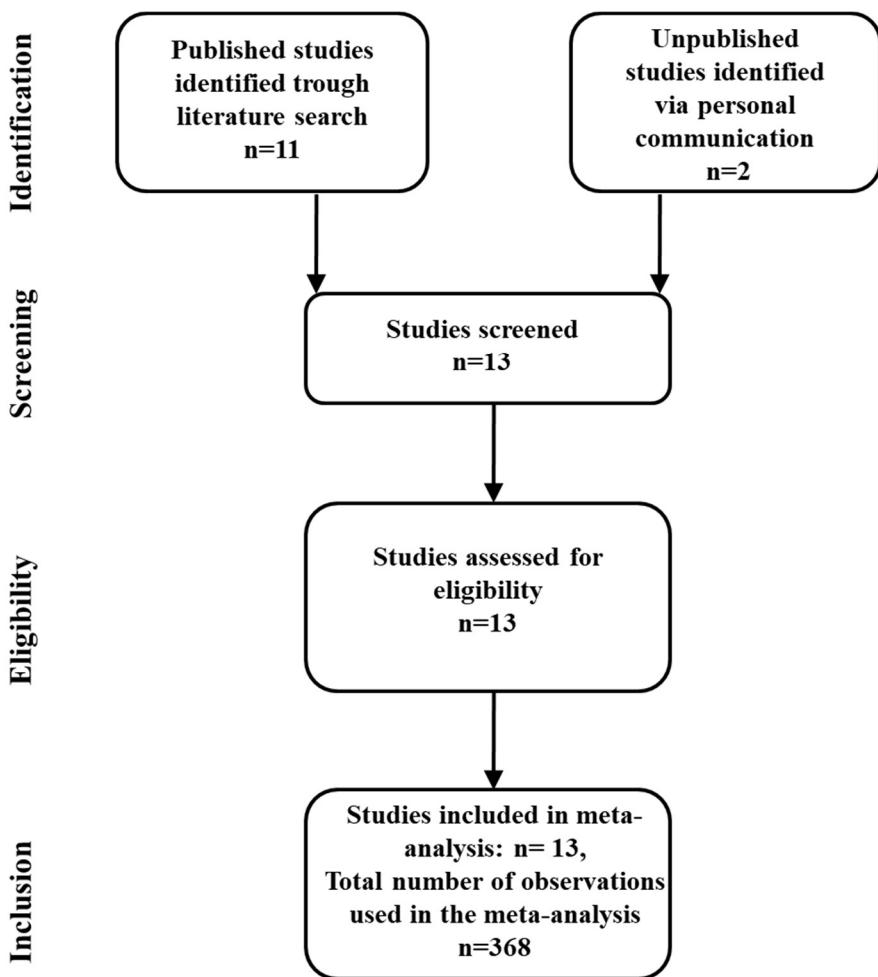
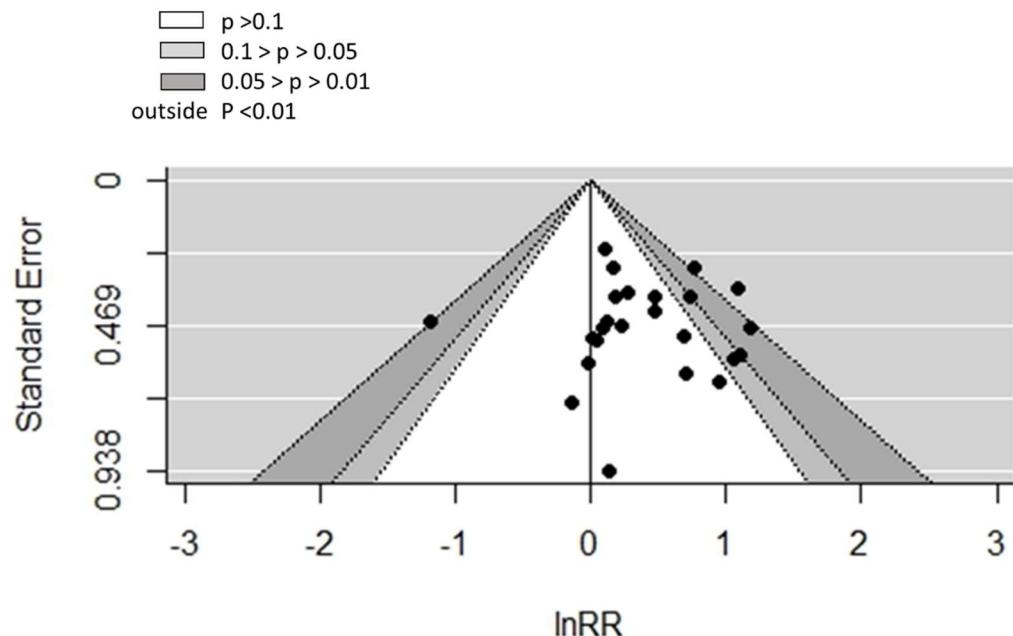


## Supplemental Document

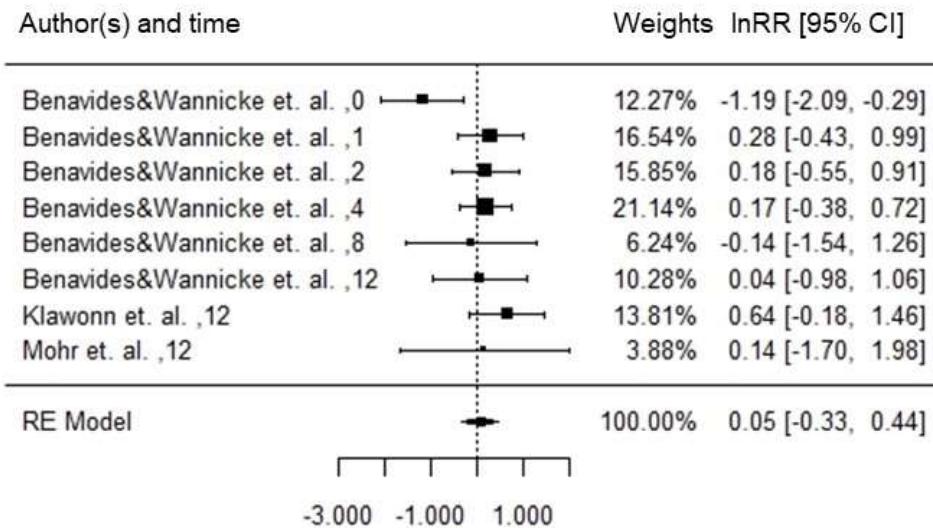
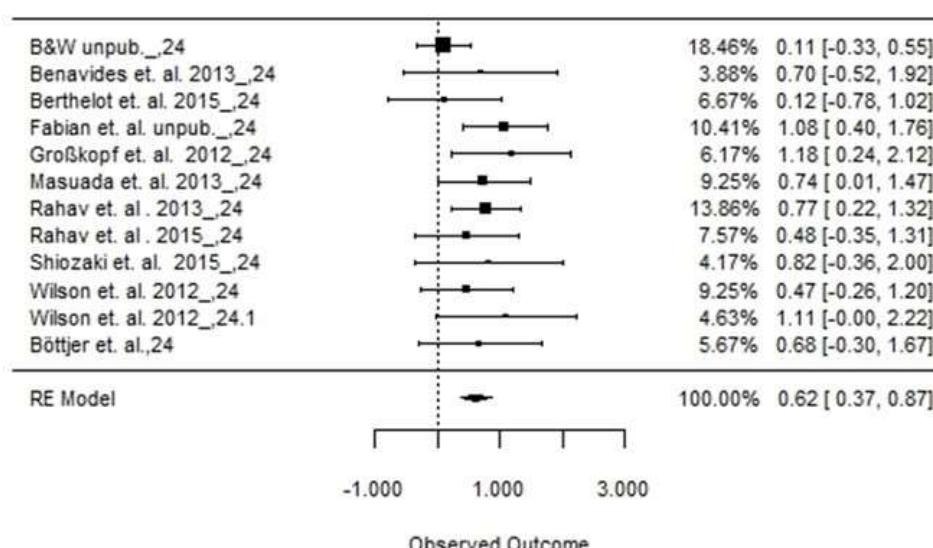


Supplemental Figure 1: Modified PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analysis) flow diagram indicating the number of studies identified during each step of our literature search and meta-analysis. Apart from all 368 observations, two subgroups were analyzed. Studies with short incubation time 0-12 hours (n=3) and long incubation times of 24 hours (n=13).

Supplemental Figure 2. Publication bias as indicated by the contour-enhanced funnel plot checking for funnel plot asymmetry using a standard meta-analytic model with standard error as the predictor. Note that the funnel is centered at zero.



Supplemental Figure 3. Forest plot of lnRR and mean effect size (i.e. RE Model) of enriched water versus bubble method for (A) short incubation times (0- 12 hours) and (B) long incubation times of 24 hours. Left panel indicates authors and incubation time. Middle panel denotes each study represented by a filled square and horizontal line (symbol size represents corresponding weighted lnRR and 95% confidence interval). Right panel indicates symbols as depicted in the middle panel in numbers. Studies with confidence intervals that intersect the vertical line of unity ( $\ln RR=0$ ) indicate no difference between the enriched water and bubble method. Heterogeneity of the meta-analysis is indicated by  $Q_M$  (df 7) = 10.06,  $p= 0.185$  for (A) and for  $Q_M$  (df 11) = 10.98,  $p= 0.446$  for (B).

**(A)****(B)**

29 Supplemental Table 1:

S1 - Statistical output of the meta-analyses performed using a random-effects model. LnRR, 95% confidence interval, as well as statistical significance (p) of each study is presented. Also shown are meta-data and number of observations.							
Authors	Publication year	Mean effect size		Temperature	Origin of species studied/Sampling site	# of observations	
		weighted LnRR / *unweighted	95% conf. Interv. /*SE				
Mohr et. al.	2010	*0.927	0.643*		28.00	South Atlantic	3.00
Großkopf et. al.	2012	0.585	0.221	<0.001	23.00	Atlantic	75
Wilson et. al.	2012	0.523	0.065	<0.05	25.00	North Pacific	18
Wilson et. al.	2012	1.176	0.094	<0.01	25.00	North Pacific	18
Benavides et. al.	2013	0.962	0.13	0.0705	22.97	subtropical North Atlantic	38
Masuada et. al.	2013	0.71	0.148	<0.001	24.00	subtropical Pacific	8
Rahav et. al.	2013	0.746	0.099	<0.001		Mediterranean	21
Berthelot et. al.	2015	0.122	0.209	0.5606	42880.00	South Pacific	9
Klawon et. al.	2015	*0.641	0.175*		24.000	North Sea	4
Rahav et. al.	2015	0.489	0.166			Red Sea	6
Shiozaki et. al.	2015	0.967	0.336	<0.05	42877.00	North Pacific	12
Böttjer et. al.	2017	0.683	0.255	<0.01	42880.00	North Pacific	42
Benavides & Wannicke et. al.	unpub.	-0.034	0.19	0.9935	15.00	Baltic Sea	21
Fabian et. al.	unpub.	1.079	0.149	<0.001	42903.00	Baltic Sea	100
<b>Full Citation</b>							
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