

Table S1. Ingredients of the diet prepared for the various treatments

Ingredients	Percent	Nutrient type
Soy flour	15	Macronutrients
Oat flour	20	
Fish meal	12	
Gluten	8	
Soy oil	2	Others
Fish oil	2	
Cornstarch	30.19	
Gelatin	6	
Rovimix <sup>®</sup> (vitamin and mineral mix)	2	Micronutrients
Stay C <sup>®</sup>	0.07	
Cholesterol	0.5	
DHA NATUR <sup>®</sup> al 24%	1	
Sodium benzoate	0.23	
BHT (butylated hydroxytoluene)	0.01	
Phospholipids	1	
TOTAL	100	

Table S2. Abbreviations used for the different treatments. NE: no equivalent treatment

Bioassay 1 treatments	Nomenclature	Bioassay 2 treatments	Nomenclature
WSSV-free Negative Control injected with dsRNA Intramuscular (-)	NO-WSSV-ds	WSSV-free Negative Control	NO-WSSV
Chitosan Negative Control WSSV-free organisms	NO-WSSV-Q	NE	
VLPs mixed in feed and fed simultaneously with WSSV infection	W-VMS-1	VLPs mixed in feed and fed simultaneously with WSSV infection	W-VMS-2
dsRNA intramuscular injection	W-dsRNA IM-1	dsRNA intramuscular injection	W-dsRNA IM-2
VLP intramuscular injection	W-VIM-1	VLP intramuscular injection	W-VIM-2
VLPs incorporated into the food coat and delivered post-infection	W-VREC POST	VLP mixed in feed and supplied post-infection	W-VM POST
Chitosan nanoparticles delivered simultaneously to the infection	W-QS-1	Chitosan nanoparticles delivered simultaneously to the infection	W-QS-2
VLPs incorporated into the food coat and delivered Pre-infection	W-VREC-PRE	NE	
WSSV per os positive control	WSSV PER-OS-1	WSSV per os positive control	WSSV PER-OS-2
Naked dsRNA in the food attached to the coating.	W-ds-REC	Naked dsRNA mixed in the food	W-ds-MIX
VLPs incorporated into the food coat delivered simultaneously with infection.	W-VREC	Chitosan nanoparticles mixed in the feed delivered post-infection	W-QPOST
WSSV Intramuscular injection Positive Control	WSSV IM	NE	

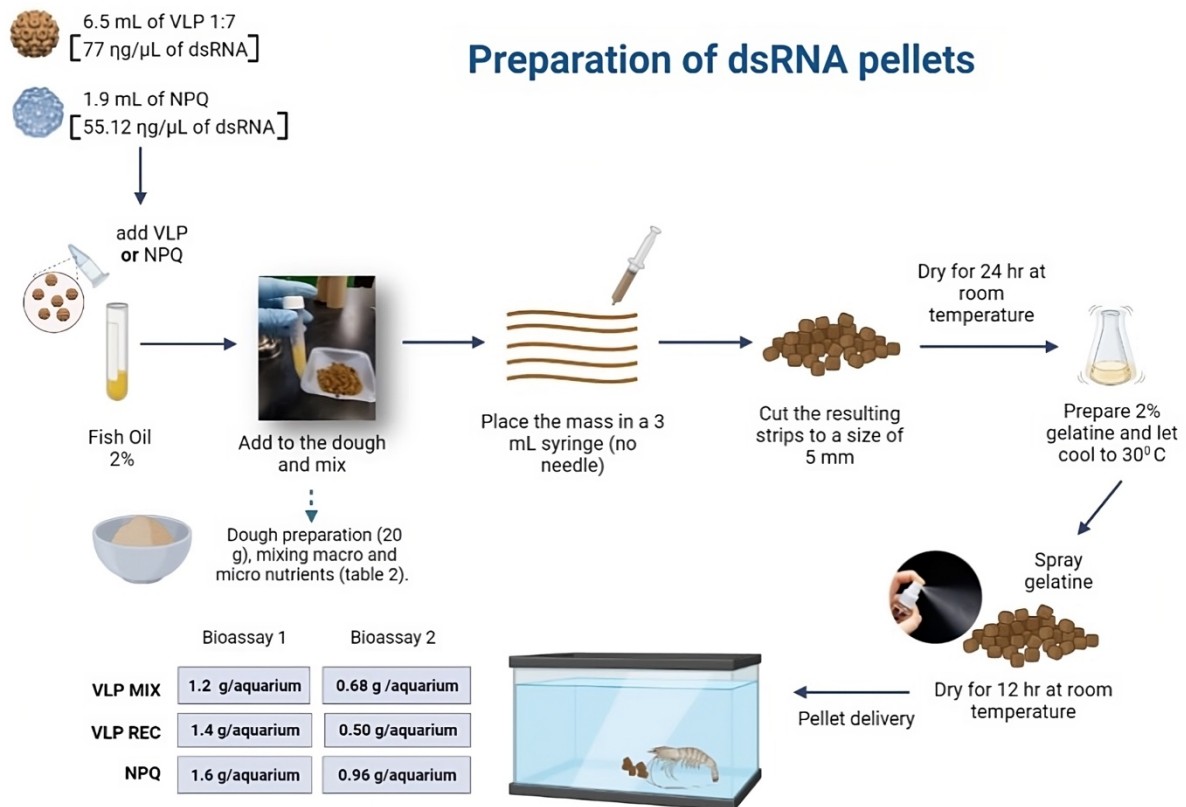


Fig. S1. Virus-like particles (VLPs) and nanoparticles of chitosan (NPQs) were first prepared and diluted in fish oil, after which they were incorporated into a dough mixture. This mixture was then extruded into several lines using a syringe. Each line was cut into sections and allowed to dry. Subsequently, gelatin was dissolved and sprayed onto the dried sections. The feed was then left to dry completely before being delivered to the shrimp for experimental bioassays

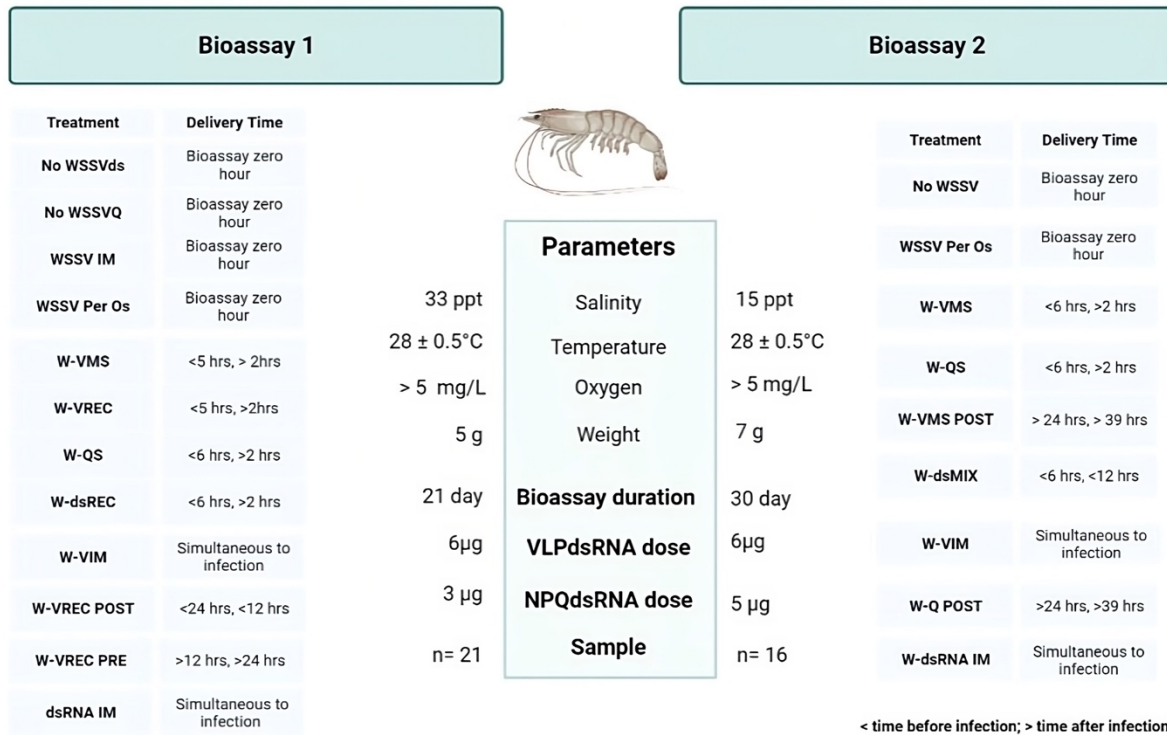


Fig. S2. Details of the 2 bioassays conducted using the prepared feed: treatments included in each, culture conditions, physicochemical parameters, duration, and dosage employed