



SDI Review Form 1.6

PART 1:

Journal Name:	<u>British Journal of Applied Science & Technology</u>
Manuscript Number:	2013_BJAST_4486
Title of the Manuscript:	EFFECT OF GRADED LEVELS OF YEAST FED IN WATER ON THE PERFORMANCE OF BROILER CHICKENS
Type of the Article	Research paper

General guideline for Peer Review process is available in this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 7 parts. Kindly note that you should use all the parts of this review form.



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PART 2: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	This is an informative study for the poultry production in Nigeria, however, more details should be addressed in the manuscript. 1. What kind of yeast product was supplemented to the broilers? Whole cells, yeast extract, or yeast cell wall only? Powder or granular? Autoclaved or live? All of these variations will influence the growth performance. 2. why was the yeast added in the water, but not in the feed? Yeast in feed is easier to conserve. How often was the water replaced? Yeast in the water is easy to cause other microorganisms growth, and therefore retard the growth of broilers. 3. the experiment period for starter and finisher?? 4. what kind of facility did the broiler housed? And the temperature and humidity is under control? 5. does the experiment approved by the institute of animal care and use committee?? 6. In the experiment of starter, why eat more and gain less in 2.0 g yeast group? How about the apparent digestibility of whole GI tract? Did the birds of 2.0g had a less digestibility? 7. on page 4, line 65-68, the authors mentioned that high yeast intake caused excess alcohol production, where did the alcohol produced from? GI tract or feed? Please explain more and give the reference to support the statement. 8. on page 4 line 75-76, the author mentioned that yeast converted the feed carbohydrate into alcohol and CO₂, however, the timing for yeast to ferment is not long	Thank you. 1. <i>Saccharomyces cerevisiae</i>. Whole baker's Angel yellow label yeast. Powder. Live yeast. Thank you again. 2. The yeast not added only in water, but also in feed and in feed and water. Ok! Yeast was added in water as much as the birds could empty there watering cans except at night. I agree with you because yeast in feed treatment did better than yeast in water but with a particular trend. 5g and 1g yeast did better than 1.5g and 2g yeast inclusion levels. Performance dropped as yeast level increased even though yeast treatment did better than the control treatment. 3. Starter period started after 1week of adjustment. That means it lasted 3weeks while the finisher phase lasted for 4 weeks. 4. They were housed in a deep litter (open floor covered with wood shavings). No temperature and relative humidity were under control. This is Nigeria, NOT America.



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	enough, the author should find a more possible explanation, otherwise cited the reference to support the statement. 9. on table 1.0, please identify ME/MJ/KG, and FE should be specified as intake/body weight 10. there are many references demonstrating oligosaccharides and Se as growth promoters for broilers, however, according to the references that the authors cited (He et al, 2007; Park et al., 2001), they did not support that yeast contains Se and oligosaccharide, the authors lacked of direct/indirect evidences to support this speculations. Oligosaccharide is prebiotics and yeast is probiotics, the author should be clarified.	5. I do not understand the question because many of us eat bread and other baker's yeast products. 6. The yeast fed was in excess and probably converted to alcohol which denatured enzymes, protein and provided less energy and it would have and birds eat to meet their enrgy needs. 7. Organisms such as yeast which carry out alcoholic fermentation contain the enzyme pyruvate decarboxylase which is abscent in animals. The enzyme requires <i>thiamin pyrophosphate</i> (TPP) and Mg^{++} and co-factors to catalyse decarboxylation of pyruvate to acetaldehyde and CO_2.The final reaction is the reduction of acetaldehyde to ethanol by NADH 8. Yeast fermentation may not be long, but when alcohol is tightly corked or kept open which one will evaporate faster? The alcohol produced when yeast is feed in feed evaporates faster and has litle effect but the one produced endogenously has a profound effect. Production is short-lived according to you but may be of large quantity that would have a devastating effect. 9. Thank you 10.Prebiotics are not living agents, probiotics are. Selenium is an element,
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		yeast is not. Oligosaccharides are sugars of 2-10 simple sugar units, yeast is a living thing. Again, less I forget. Do not confuse (1) Whole yeast and yeast wall extracts. (2) Selenium in yeast and Selenium or even Chromium enriched yeast..... Thank you for your contributions.
<u>Minor</u> REVISION comments	Format is not consistent	
<u>Optional/General</u> comments		