



بسم الله الرحمن الرحيم

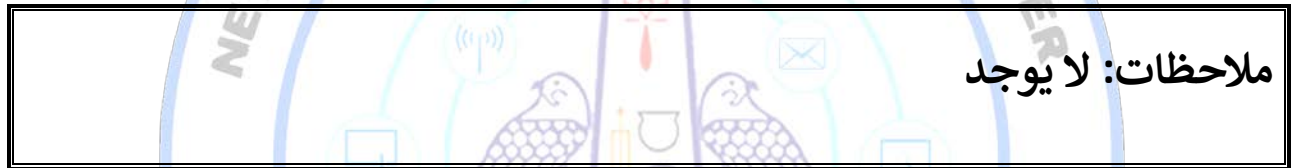
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Ain Shams University
Faculty of Women
For Arts, Science and Education

Assessment of the Anti-proliferative Capabilities of Probiotic Bacteria on some Malignant Cell Lines

A thesis

Submitted in partial fulfilment for a Master's degree in microbiology

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

يَرْفَعُ اللَّهُ الَّذِينَ
آمَنُوا مِنْكُمْ وَالَّذِينَ
أُوتُوا الْعِلْمَ
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Dedication

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LIST OF ABBREVIATIONS

Abbreviation	The name
BC	Breast cancer
BD	<i>Bifidobacterium bifidum</i>
CACO	Human colon cancer
CCD	Central Composite Design
Chemo	Chemotherapy
CRC	Colorectal cancer
DMSO	Di-methyl sulfoxide
EPS	Extra polysaccharides
FBS	Fetal bovine serum
GIT	Gastro intestinal tract
LAB	Lactic acid bacteria
Lb.a	<i>Lactobacillus acidophilus</i>
Lb.c	<i>Lactobacillus casei</i>
LD	<i>Lactobacillus delbreuckii</i>
MCF7	Human breast cancer
miRNAs	MicroRNAs
MTT	The 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl-2H-tetrazolium bromide (MTT)
NADH	Nicotinamide adenine dinucleotide+hydrogen
nsRNAs	Non coding RNAs
O. D	Optical density
PB	Placket-Burman
Pbs	Phosphate buffered saline
PCR	Polymerase Chain Reaction
PI	Propidium iodide

RB1	Retinoblastoma
RPM	Rotation per minute
RSM	Response surface Methodology
SOD	Superoxide dismutase
TLR	Toll-like receptor
TnTs	Tunneling nanotubes
WHO	World Health Organization